SCHOOL LIFE

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Official Journal of the . . .

OFFICE OF EDUCATION

Home Economics Facilities
JAMES L. TAYLOR and JOHNIE CHRISTIAN

The Nongraded School
STUART E. DEAN

DECEMBER 1964

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President Johnson establishes Interagency Committee on Education

President Johnson, by executive order dated October 16, established a Federal Interagency Committee on Education and directed it to strengthen and coordinate Federal policies and programs related to education.

The Committee is composed of the U.S. Commissioner of Education, who is chairman, and members from these Federal agencies: The Departments of State, Defense, Agriculture, and Labor, the National Science Foundation, Atomic Energy Commission, and the National Aeronautics and Space Agency.

The order directs the Secretary of Health, Education, and Welfare, assisted by the Commissioner, to identify the needs and goals of education in the Nation and from time to time recommend to the President policies and programs for promoting the progress of education.

It directs the Commissioner of Education under the direction of the Secretary to carry out these functions:

To study the current effects of Federal activities on educational programs in States, and local and nonprofit institutions; estimate trends of such activities; and, taking into consideration the relation between education and policies in such fields as manpower development, defense, military manpower, economic growth, and science, to develop recommendations for educational activities or the coordination of policies affecting such activities.

To exercise leadership in trying to resolve differences of opinion on policies or administrative practices on Federal activities affecting educational institutions.

To arrange to obtain advice and information, including the organization of ad hoc groups to consider special problems and the use of existing interagency machinery.

The order directs the heads of Federal agencies to be responsible for the following actions:

Insuring, insofar as possible (1)

U.S. DEPARTMENT OF HEALTH, EDUCATION, AND WELFARE • ANTHONY J. CELEBREZZE, *Secretary*
OFFICE OF EDUCATION . . . FRANCIS KEPPEL, *Commissioner*
L. V. GOODMAN, *Director, Office of Information*

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conformity of their educational programs with educational goals and practices of the Nation as identified by the Secretary, and (2) consistent with administrative policies and practices among Federal agencies in conducting similar programs.

Keeping each other informed on programs in order to coordinate planning and prevent duplication of activities.

Providing information on education requested by the Secretary or the Commissioner.

Cooperating with the Secretary and the Commissioner in making such studies and analyses as may be required to carry out the responsibilities assigned by this order.

Award made for building mental retardation centers

By 1968 the first two large-scale mental retardation research centers financed in part by the Mental Retardation Facilities and the Community Mental Health Centers Construction Act of 1963 (Public Law 88–164) will be completed. The Public Health Service has awarded $3,750,000 to the Albert Einstein College of Medicine of Yeshiva University and $6,040,000 to the University of Washington School of Medicine.

The act authorizes grants for the construction of centers for research on mental retardation and related aspects of human development and for the training of specialists to work with the mentally retarded. The first two grants will cover about 75 percent of the anticipated cost. The institutions have agreed to the use of the centers for research and training for 20 years.

Einstein College will build a 10-story building adjacent to the Jacobi Hospital of the Bronx Municipal Hospital Center. The Center's research program will emphasize the biomedical, psychological, and environmental aspects of mental retardation. Studies will also center on the behavioral, social, and educational sciences in relation to mental retardation.

The University of Washington will build three new buildings and remodel space in its Health Sciences Building. The new space will provide for a multidisciplinary diagnostic clinic, an experimental school, a short-term residential unit for clinical and educational research, and for professional training. Research will be in the fields of biology, medicine, and behavioral sciences.

The awards were made after a year's intensive planning between the institutions and NIH.

Blind students to study Arabic and Chinese

Occidental College will enroll 12 blind students with aptitude for languages next year to train as linguists in Arabic and Chinese. In a program supported in part by the U.S. Vocational Rehabilitation Administration, the students, all of them with good high school records, will take a 5-year college program leading to a B.A. degree. The extra year will be necessary because the program will concentrate heavily on learning Arabic and Chinese.

VRA will pay the tuition for the students; vocational rehabilitation agencies in the States where they live will pay room and board, except for students who can pay their own way.

Occidental's program will be modeled on a program in Russian and German being conducted for blind students at Georgetown University, also partly supported by VRA.

Advisory committee appointed for higher education program

A national advisory committee on title II of the Higher Education Facilities Act, representing colleges and universities and the Federal Government, has been appointed by Commissioner of Education Francis Keppel. As directed by the act, the committee will advise the Commissioner of Education on applications for grants for the construction of graduate schools and centers and on the preparation of general regulations and policy matters in administering title II. The committee members are Alfred B. Bonds, Jr., president, Baldwin-Wallace College; Carey Croneis, chancellor, Rice University; E. T. Dunlap, chancellor, Oklahoma State Regents for Higher Education; Paul C. Reinert, president, St. Louis University; Henry W. Riecken, associate director of scientific personnel and education, National Science Foundation; David Z. Robinson, Office of Science and Technology; Theodore R. Sizer, dean of the Graduate School of Education, Harvard University; Richard H. Sullivan, president, Reed College; and Stephen J. Wright, president, Fisk University. Commissioner Keppel is chairman of the committee.

The Congress appropriated $463.15 million for fiscal year 1965 for the Higher Education Facilities Act. Of this amount, $60 million is earmarked for title II. The other two titles of the act authorize grants for the construction of undergraduate facilities and academic facilities.

The national advisory committee for title II met for the first time on November 21–22 in Washington.

FSI establishes University Exchange Program

The Foreign Service Institute (Department of State) has inaugurated a University Exchange Program for senior Foreign Service officers. Through the program, selected officers will be granted a year for study and reflection at a U.S. university, to give them an opportunity to renew their acquaintance with life in the United States.

Although the officers will join the staffs of universities as senior professors, they will not be assigned teaching duties. Instead, they will conduct research, attend seminars, speak on foreign affairs to faculty and community meetings, and act as informal advisers to students interested in Foreign Service careers.

Selection will be made on the basis of the officer's career distinction, reflective and communicative abilities, and the degree to which the experience should stimulate growth.

For Young Children in a Changing World

Notes on the 10th World Assembly of OMEP

LILLIAN L. GORE

CHILDREN in a rapidly changing world" was the theme of the 10th World Assembly of the World Organization for Early Childhood Education held in Stockholm last summer. Delegates from more than 35 nations attended, including 90 from the United States. I was one of these. The Assembly offered many stimulating ideas, and my visit to Scandanavia gave me many opportunities to observe facilities for the education of young children in Sweden and Norway and to discuss these facilities with educators responsible for them.

In an age full of organizations and agencies called by acronyms and letters, the presence of a group such as the World Organization for Early Childhood Education—called OMEP for its name in French—is sometimes lost in the crowd. For this reason, let me preface my discussion of the Assembly with a brief report on the history and work of OMEP.

Background of OMEP

OMEP, an international, nongovernment organization was founded in 1948, largely as the result of the work of Lady Allen of Hurtwood, a British landscape architect, and Alva Myrdal, a Swedish educator and diplomat (wife of Gunnar Myrdal). The major aim of OMEP is to promote greater understanding of children under 8 years of age, to furnish different nations with means of sharing experiences, and to promote better educational opportunities for young children throughout the world. Membership is open to organizations and persons of all races, creeds, and nationalities. OMEP believes that men can work together despite great differences to foster "happy childhood and home life" and so to contribute to education and world peace. It issues two yearly newsletters, is a consultant to UNICEF and UNESCO, has held seminars on teacher and parent education, and has surveyed nursery schools and promoted research. Each national committee, while ascribing to the rules of OMEP, is free to work in its own way according to the needs of its own country.

To join OMEP, educators and other specialists working with children in a country form a national committee. The committee accepts the statutes of OMEP and submits its constitution to the Council, OMEP's executive body. When accepted by OMEP, the national committee elects a delegate and a deputy to the Council.

OMEP holds world assemblies every 2 years in leading cities of the world. The 1962 meeting was in London; this year's, of course, in Stockholm. The 1966 meeting will be held in Paris; the 1968 in the United States, in a city not yet selected. OMEP has never met in the United States.

Dr. Gore is a specialist for early elementary education in the Elementary and Secondary Organization and Administration Branch of the U.S. Office of Education. She has been a classroom teacher, an elementary school principal, a supervisor of elementary education, and a college instructor. Her previous contributions to School Life *include "The Nongraded Primary Unit," March 1962, and "What Is a Good Nursery School?," June 1963.*

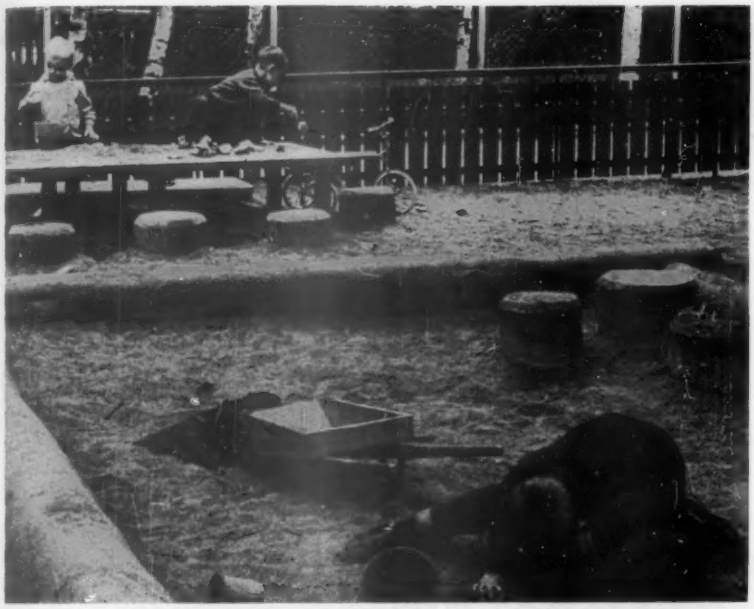
The Assembly speakers

Under the general theme (children in a rapidly changing world) the Assembly considered the topics of "The Changing Family Situation," "Children in High Houses and Crowded Streets and the Need for Early Planning," and "The Problems of Children in Developing Countries."

The first speaker, Mrs. Myrdal, discussed "The Changing Family Situation." Man, she said, has shown a great capacity for survival, a capacity being tested to the utmost. Women have been hit the hardest by recent changes. Changes affecting the present generation will also affect the child's world, particularly his conception of men's and women's roles in life. Primers still show fathers who work and mothers who serve, but more and more women are working outside the home so these books do not interpret the world as it is. Another great change in many countries is the shift of population from rural areas to cities. The old clan life is disappearing. On the whole, families are smaller and life is longer. The age for marriage is lower and marriage, despite the seemingly high divorce rate, lasts longer because of the longer life span. These conditions are affecting child-rearing practices.

"The trend toward modernization, toward rationality in worldly affairs must be recognized as the destiny of our times. . . . Science . . . should be introduced early in life, so that children become so thoroughly familiar with 'things' and the laws governing them, that they get a basic feeling of security in the material world and in their ability to manipulate it. . . . Children become humans through a developmental process which is a never-ending adventure in creating a personal identity by adapting influences from others."

Children must be educated for these changes. We should move away from "childcentration" in the home to give the mother a life much more evenly divided between duties and pleasures



These pictures, taken at a day nursery in Oslo, demonstrate some of the commendable features typical of playgrounds in Scandinavia—ample space to encourage creative play and novel play equipment.

to enrich all phases of her life. We should prepare children to stand a "certain degree of neglect" as opposed to over-protection. There is an urgent need to develop early a child's independence, self-reliance, and ability to live on his own inner resources.

Changes—more working women with fewer leisure hours and more labor-free years for the young—necessitate a more adequate family pattern.

Part of the responsibility for education for change is on the teacher. But few teachers are realizing for what a "different" future they must prepare the next generation, and some are ill-prepared for the task.

The second topic, "Children in High Houses and Crowded Streets," was discussed at a symposium by several delegates, including architects, a city planner, and teachers.

Svein Stensaasen of Norway, an architect, pointed out that studies show that children living above the third floor in high houses seldom play outdoors. City planners must, he insisted, take such a condition into account. When houses are high, provisions should be made on every sixth floor for play space for young children. Plans must include provisions for the safety and health of children wherever playgrounds and schools are located. Children must not have leftovers—after space has been taken for parking lots, for instance. Adequate space is most important.

Another architect, Hans Wohlin of the Stockholm City Building Office, stressed that we must give children the greatest possible protection and security in a motorized society. We must create suitable conditions for the child's outdoor play, social intercourse, and—privacy. Children faced with traffic have a special problem. For one thing, the preschool child has no understanding of safety and danger. He is "innocent of traffic." The motorist, for his part, has trouble seeing small children. Mr. Wohlin's other comments included the recommendation that play areas allow for movement and variation because children tire when they cannot move.

An American teacher, Flemmie P. Kittrell, professor of home economics, Howard University, in a discussion of "Problems of Home and Families in Modern Living," quoted Carl Sandburg as saying that all men have the same needs—clothing, food, work, sleep, games, worship. Technology, she said, has lifted some burdens, but has brought others. Next to peace, the world's greatest needs are for housing and food. Many countries need more education on scientific agri-

culture and ways of sharing food production in order to keep hunger from growing rapidly in the world.

Dr. Kittrell closed by saying that education can help the family to solve problems in the midst of change and that the family, despite change, remains the cornerstone of human development.

Lady Allen of Hurtwood, a participant in the symposium, discussed playgrounds for young children, a subject on which she is well-qualified to speak because she has planned many playgrounds in London. She said that the requirements for children under 8 are simple, but they are often misunderstood by planners. Studies in England also show that children living above the third floor in high houses rarely play outside. The flat is the quintessence of tight, careful planning with all waste space cut down. The child cannot explore cellars, attics, dark corners. These sources of delight and mystery must be replaced with play facilities incorporating these characteristics.

The environment we create for the child must help him to develop self-reliance. He must be able to test his limbs, his senses, and his brain so that they will become obedient to his will. Playgrounds must accommodate as much activity as possible. Without opportunity for full activity the child may become fearful and withdrawn. The setting of the playground must offer security to child and mother.

Playgrounds, she said, must offer "hills and banks and other climbing opportunities; water; sand; building plankets and tools; digging areas; undulating paths for wheeled toys and tricycles; sympathetic and varied surfacing materials; protection from wind; shrub and tree plantings to play amongst; low seats and tables; and some barriers to prevent children from wandering away. All playgrounds for small children should be in their own scale and peaceful and beautiful, for children respond to beauty more than perhaps we know."

A delegate from India, Mrs. Ika Paul Pont, was the principal speaker at the session on the "Problems of Children in Developing Countries." Mrs. Pont pointed out that there are many children in the world who have trouble sleeping and who have very little to eat. In such countries as her own there are rich people and poor people, and very few in between. From 70 to 80 percent of the women of India work; the child is left in the care of a sister or a grandmother. Infant mortality is still high.

India needs teachers, perhaps a million. They do not have to be college graduates, for the needs are fundamental. Above all they must know the basic rules of health and safety.

Mabel Denny, a delegate from Great Britain, talked about a project being carried out in Australia. Buses go to homes or villages with a teacher and nursery school materials. The teacher says, "Would you like us to come back next week or in a fortnight?" Such a plan, she suggested, might work in developing countries, where children may be running about undressed and playing in the mud. Bringing the classroom to the child, rather than erecting a school building, may be more helpful. Each country should be helped according to its needs.

Delegate reports

Among the many reports submitted by delegations to the Assembly, I made note of several that seem to indicate a trend toward providing for more and more early childhood education in various parts of the world.

Israel reported that it has compulsory free education for all children beginning at 5 years. In addition, about 50 percent of its 4-year-old children are in school and 30 percent of its 3-year-olds.

Hungary has had nursery schools for 136 years, but the movement was really accelerated after World War II. It now has more than 3,000 nursery schools and more than 40 percent of its 3-to-5-year-olds attend them.

West Germany has kindergartens for all children 3 to 6 years old, if parents want them to attend. It also has day-care centers for children of all ages.

Japan has had kindergartens as a substantial part of its education program since 1947, but attendance is not compulsory. Most 5-year-old children do attend, however. Most of the country's more than 10,000 nurseries (both public and private) are in cities. The country is now moving to establish more kindergartens and nursery schools in rural areas.

Progress is being made in developing countries. For example, Uganda is carrying preschool programs to rural areas. Thailand is developing kindergartens, and one of its colleges is training kindergarten teachers.

In a discussion of who attends free schools for 3- and 4-year-old children, delegates reported that where all 5-year-olds attend school, the most needy tend to be given preference. Many countries recognize the exceptional value of school for young disadvantaged children.

In summarizing the Conference, Gerthan Morgan, University of Maryland, declared that "the necessary resources are available to provide reasonable self-fulfillment for children everywhere. The world has these resources. Groups of people like us represent ways of improving opportunities for people throughout the world—human beings who can cope with change, who are not afraid of an uncharted future and rapid change . . . who can learn."

A view from Scandinavia

After the Assembly (and between sessions while I was in Stockholm) I had opportunities to visit schools and playgrounds in Sweden and Norway and to talk with officials and teachers. These opportunities proved to be extra dividends indeed!

Stockholm provides well for its young children through play parks and playgrounds. By law, every housing development must provide for adequate playgrounds. Such provi-

sion is the first consideration in the planning of a project. As I watched children at play in the parks of the city—and in other parts of Sweden, too—I thought how well the parks had been planned and executed. Equipment, landscaping, supervision, programs—all seem to be aimed at providing for happy childhood and the all-round growth of children.

Stockholm is striving to provide one large playground for every 5,000 inhabitants (1,000 children). But there are many smaller playgrounds as well, since younger children should not go far from home. A large playground (of about 2 acres) includes grassy areas; wading pools; soccer courts; buildings for indoor play, laboratories, storage space, and playground equipment; and planting and hedges. Generous supplies of movable materials make possible the rich and varied activity that goes on at Swedish playgrounds. The Stockholm Children's Theatre tours the playgrounds in the summer. Punch and Judy shows and other marionette programs are popular. Specialists in dramatics, puppetry, sports, and carpentry visit the playgrounds from time to time to work with the children. Activities include throwing at targets, obstacle races, relay races, and stilt-walking. Grounds have enclosures for children under 5.

The Chief Playground Inspector is a member of the Parks Department. She has six section leaders under her, each controlling one district with about 12 playgrounds. Each park has two leaders with experience in camps, children's homes, or nursery schools. They receive salaries comparable to those received by teachers. While working in the parks they wear distinctive blue dresses or overalls so that the children can find them easily. The play leader is a sort of hostess whose job it is to see that children have a good time. Leaders are counselors to children and parents alike. Sweden—and Denmark—have learned that no matter how well laid out a playground is, children will eventually go back to the streets unless a grownup is present to bring the playground to life through proper guidance of the program.

Among the most promising projects in Stockholm are the "junk playgrounds." The idea was conceived by a noted landscape architect, who saw that the playgrounds built to his designs were not used as fully as they could be but that "junk" nearby, such as discarded lumber, was. He has designed playgrounds containing many such items as lumber, boxes, logs, and barrels. In a junk playground the child can satisfy his need for adventure. These playgrounds have special problems, to be sure, not the least of which is the adult's love of tidiness. In any case, there is more space than equipment in the "junk" playgrounds. Several other countries have adopted the idea with success.

I also had the privilege of visiting a few playgrounds and schools in Norway and have supplemented the knowledge I gained by visits with a study of reports and information given me by officials. The standard of living is high in Norway (as it is in Sweden) and so are the standards for health and recreation.

Day nurseries where mothers can leave their children while they are working were established as long as 100 years ago. The main difference between a day nursery and the kindergarten today in Sweden is that the day nursery is usually open longer (9 to 11 hours). The nursery is larger and has a larger staff since its purpose is to give children care and attention corresponding to home care. The first objective is to give the child care and safety; the second is to give emotional, social, and educational guidance. But it also provides opportunities for games and activities as does the kindergarten. Children usually receive two meals a day, breakfast and a noonday meal.

Kindergartens began to be popular in Norway shortly before World War II. In Oslo, where I visited kindergartens and a day nursery, the committee of housewives for kindergartens with the help of a paid professional consultant has been most successful in opening and maintaining kindergartens. Several industrial plants have kindergartens for the children of women employees. They are supported in part by the municipalities.

Norway's kindergartens are for children ages 3 to 7. They strive to improve the child's development by means of games and occupations under the guidance of trained teachers. With other social agencies they try to help the child to become socially adaptable and to develop mentally, and physically as an individual.

Though I was unable to visit schools and playgrounds in Denmark to round out my educational tour of Scandinavia, I have talked with officials and studied reports of the ministry of education on day-care centers and nursery schools. I find that in Denmark the first centers were set up for the children of working mothers about 1830. But most of the schools date from about 1900. The number of centers has increased steadily. Public assistance has helped. The term kindergarten applies to any institution devoted to early childhood education for children from 2½ years to 7, when they enter regular schools. Many children spend the whole day in a nursery school if their mothers are working. There are about 123 day-care centers, nursery schools, and kindergartens. They serve about 33,000 children. Groups are kept small to make activities more like home. All approved institutions receive help from the government up to 40 percent of their operating cost.

I AM GLAD that the U.S. members of OMEP will be hosts to the organization's world assembly in 4 years. All that I gained from attending the Stockholm meeting itself leads me to believe that the work of committees and the interchange of information among educators and other specialists concerned with the welfare and education of young children will benefit little children everywhere, including those of our own country.

Special Education Reaches Nearly 2 Million Children

ROMAINE P. MACKIE

TODAY the Nation is providing special education for approximately 1,670,000 children and young people—the largest number our schools have ever served. The number is both a measure of the progress we have made and the distance we must go to provide for the estimated 6 million schoolage children who need special education.

To bring educational opportunity to even 1.7 million children, the American schools have been resourceful and ingenious in developing a variety of special education programs. They have, however, been aided by interested and dedicated laymen, legislative bodies, and many national and State organizations and agencies.

Education programs are available to serve various types of exceptional children, including the blind, partially seeing, deaf, hard of hearing, speech impaired, socially maladjusted, emotionally disturbed, mentally retarded, gifted, crippled, and the ones with special health problems. These children receive instruction in special day schools, special classes in regular schools, residential schools, hospitals and clinics, and when no other plan is available, in their own home. Special school programs are served by numerous persons ranging from itinerant teachers to speech and hearing specialists.

It is in the best interest of some of these children to spend a full day in a special school or class. Some need special education facilities for only part of the day and can attend in the regular elementary or secondary program for the remainder of the day. Some require special education for only a short period—perhaps for a few months; others require it throughout their lives. Still others will need to be transferred from one type of program to another. For example, a physically handicapped child might move from hospital or home instruction to a special class and possibly back to a regular school. Many schools and communities, aware of the advantages of easy and fluid movement of some handicapped children from one type of school program to another, have set up flexible programs for them.

Dr. Mackie is chief, Personnel Requirements for Handicapped Children and Youth, Office of Education. She directed the Office study, Statistics of Special Education for Exceptional Children, reported here. For nearly 10 years, prior to 1963, she served as chief, Exceptional Children and Youth in the Office of Education. Before coming to the Office in 1947, she had been consultant on physically handicapped children in California State Department of Education and staff member Columbia University and Hunter College of the City of New York. She is the author of numerous books, articles, and research reports dealing with special education.

IN FEBRUARY 1963 the public day schools of the Nation enrolled about 1,559,000 pupils in special schools and classes in all of the 50 States. At the same time, residential schools, public and private, enrolled about 111,000 children. This is an increase of 670,000 pupils in public day schools, and about 23,000 in residential schools in the 5-year period preceding 1963. The public day school figures include all types of exceptional children; the residential school figures include mainly those who are blind, deaf, socially maladjusted, emotionally disturbed, and mentally retarded.

Of perhaps even greater significance than the increase in enrollment is the increase in educational opportunities for handicapped children in their own communities. Nearly 5,600 public school systems had at least one such program in 1963. In addition, at least another 5,000 school systems that did not administer a program of their own made arrangements for children to be enrolled for special education in another school system. At the beginning of the century, very few local school systems had any handicapped children in special education programs. Since that time there has been a steady increase in the development of these local programs, and the increase has been accelerated in the past quarter of a century. At least 90 percent of the children receiving special education are now enrolled in programs administered by the local public school system.

Somewhat less than 10 percent of the handicapped children enrolled in special education are in residential schools of one kind or other. They have always served severely handicapped pupils and those who live in sparsely populated areas, but today the character of some of these institutions appears to be changing in such a way as to make them an even more vital part of the total range of school services for the handicapped. For example, more of the residential schools are providing diagnostic services and short-term remedial instruction, which can be especially valuable when there is a close relationship between the institution and the child's home community.

In the present national climate, which is highly favorable to aiding the handicapped, nationwide advances in educational opportunities could have been expected. In recent years the Congress of the United States has enacted laws to further the education of handicapped children. In 1961, President John F. Kennedy carried forward the Nation's program for the handicapped by recognizing specifically the plight of the mentally retarded. He appointed a panel of ex-

perts to review the problem and to make recommendations to him. The influence of the late President's action has set in motion many activities which aid not only the mentally retarded and their families, but also the whole broad welfare movement in behalf of all handicapped persons. All States now have some legislation designed to bring educational opportunity to one or more types of exceptional children. All have budgeted some funds for special education, and all have State personnel with responsibility for these programs.

THE PRELIMINARY statistics reported here are derived from the Office of Education's 1963 survey of special education in the United States. The study extended to all public day school programs (including those administered by such units as county intermediate school districts) that were identified in an advance survey of the Nation's 31,000 local public school systems in 1962. It also included all public and private residential school programs for which a mailing list could be compiled. These programs were located in various kinds of residential facilities serving the blind, deaf, socially maladjusted, emotionally disturbed, and mentally retarded.

This basic study is now conducted approximately every 5 years as part of the Office's century-long concern for the education of the handicapped. The studies have two central purposes: First, to provide nationwide data on enrollment of pupils, number of teachers, and location of programs; and second, to provide continuous and comparable data identifying gaps in programs and services and reflecting trends and developments in the field over the years. The findings are used by many individuals and groups and for many purposes. For example, they are used in estimating the manpower needed in special education and in planning programs for the preparation of teachers.

A full-scale report of the findings for both day and residential school programs is being prepared for publication. As a result of widespread cooperation the 1963 statistics of special education are based on a response rate that exceeded 95 percent. Since some of the data for residential schools became available earlier in the survey, it was possible to prepare the following special report in advance of the final report.

Education of Handicapped Children in Residential Schools

PATRICIA P. HUNTER

SOME 284,000 of the Nation's children and young people under 20 years of age were living in institutions in 1960.[1] They were in homes and schools for the mentally retarded; in training schools for delinquents, detention homes, and prisons; in residential treatment centers, homes for unwed mothers, and hospitals for the mentally ill; in residential schools for the blind, deaf, and other physically handicapped; in tuberculosis and chronic disease hospitals; and in homes for the dependent and neglected.

During the decade between 1950 and 1960 their numbers increased by 18 percent—just about one-half of the growth rate for this age group in the population generally.[2] Taken separately, however, the number of boys and girls in institutions serving the *handicapped* showed a *gain* of about 50 percent, while the number in institutions serving the *dependent and neglected* showed a *loss* of about 25 percent. As a result, by 1960 the handicapped comprised about 75 percent of the children in institutions compared with about 60 percent in 1950 (chart 1).

Many of these children and young people can be helped to fulfill their potential as individuals and become contributing members of our society. To achieve this goal they require expert care and attention. Among the indispensables is an education program geared to the needs, abilities, and disabilities of all those able to participate.

In February 1963, 725 public and private residential institutions for the blind, deaf, socially maladjusted, emotionally disturbed, and mentally retarded were operating an education program (table 1). A peak enrollment of somewhat more than 111,000 children was reported.

Comparison of these figures with those compiled in previous Office of Education surveys provides one basis

[1] Includes "inmates of institutions" as defined for the 1960 Census of Population. U.S. Bureau of the Census. *U.S. Census of Population: 1960, Subject Reports, Inmates of Institutions, Final Report PC(2)–8A.* Washington, U.S. Government Printing Office, 1963.

[2] U.S. Bureau of the Census. *U.S. Census of Population: 1950. Vol IV, Special Reports, Part 2, Chapter C, Institutional Population.* Washington, U.S. Government Printing Office, 1953; and *Current Population Reports, Population Estimates,* Series P–25, Nos. 25, 187, 201, 251, Washington, U.S. Department of Commerce, Bureau of the Census.

Mrs. Hunter is associate director of the study on which her article is based. She is a specialist in the Personnel Requirements for Handicapped Children and Youth Section, Office of Education, and has worked with Dr. Mackie on numerous Office of Education studies and publications. Before coming to the Office in 1954, Mrs. Hunter served as executive director of various community service agencies in Los Angeles, Calif.; Boise, Idaho; and Washington, D.C.

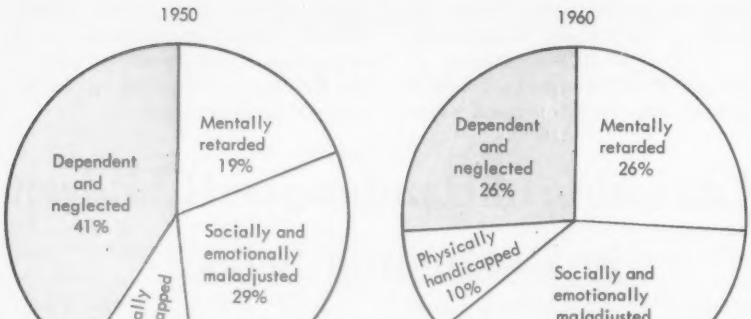


Chart 1.—**Changing population of institutionalized children under age 20: 1950–60**

for observing trends. For example, in the past 15 years there has been a nearly parallel—and recently quite marked—increase in enrollment in residential school programs for the socially maladjusted, emotionally disturbed, and mentally retarded (chart 2). This amounted to a 30-percent increase in such pupils between 1946 and 1958, and a further 40-percent increase between 1958 and 1963. While this rate of increase is not nearly so high as that of special education programs for these children in local public schools,[3] it does approximate the nearly 60-percent increase in the number of maladjusted, disturbed, and retarded children under age 20 living in institutions between 1950 and 1960.

Among the institutions surveyed, the most dramatic addition of *new* education programs was found in public hospitals for the mentally ill. Most of the approximately 100 hospitals reporting enrollments in 1963 are long-established institutions, but their school programs are mainly a product of the past 15 years. Ninety percent had initiated such a program since 1948, and 50 percent since 1958.

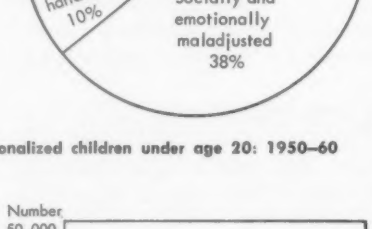


Chart 2.—**Enrollment of handicapped children in school programs of residential institutions: 1936–63**

By 1963 nearly 6,000 children and young people were participating in these school programs.

OVER THE YEARS both public and private residential institutions have provided educational programs for handicapped children. In 1963, public residential schools enrolled about 80 percent of the approximately 111,000 pupils reported. Public responsibility, however, extended even further, for fully one-half of the private institutions were receiving public funds for instructional purposes. The proportion was highest in schools for the blind (12 out of 13) and lowest in schools for the mentally retarded (35 out of about 115). These funds were usually on a per-pupil basis, and the number in any one institution for whom they were received ranged all the way from one to all of the pupils.

Not all children enrolled in residential school programs live in an institution. Conversely, not all children who live in an institution are educated there. In the programs reported here, nonresident pupils made up about 10 percent of the enrollment of the blind and deaf, 3 percent of the mentally retarded, and not quite 1 percent of the socially maladjusted and emotionally disturbed—a total of about 4,200 children and young people. Another 1,100 pupils were living in these institutions but receiving more than one-half of their instruction in some other education program. This information, obtained for the first time in the 1963 survey, will form a baseline for measuring any future trends.

Although these 5,300 pupils represent only a small percentage of the handicapped, the extent of these practices suggests a flexibility in school programs important in a field of education where resources are often limited and needs complex. More than three-fourths of the residential schools for the blind and deaf provide specialized instruction to youngsters attending as day pupils. Among institutions for the maladjusted and disturbed, 40 percent of the private residential facilities and a little over 20 percent of the public mental hospitals reported some children attending neighborhood schools. Such experience is extremely important to some youngsters in making the transition from institutional care to the relative independence of community and family living.

Some of the children enrolled in residential schools were receiving specialized instruction because of more than one handicapping condition. In order to obtain an unduplicated count, Office of Education surveys of special education have asked respondents to report pupils according to their *major* handicap. For this reason, no objective information is

[3] Romaine P. Mackie, Harold M. Williams, and Patricia P. Hunter, *Statistics of Special Education for Exceptional Children and Youth, 1957–58*, Chapter 5, Biennial Survey of Education in the United States, 1957–58. Washington, U.S. Government Printing Office, 1963. 120 pp.

available on the extent of enrollments of multihandicapped children in these programs. Numerous write-ins on the 1963 residential school forms, however, testify to the increasing difficulty of reporting some children in any one category.

There have recently been several other indications of a possible increase in educational provisions for children with certain combinations of handicaps. For example, the one new private residential school for the blind reported since 1950 was established specifically to serve blind children with additional handicaps. More information on this group of multihandicapped children will soon be available in a forthcoming Office of Education publication on special school programs for the visually handicapped.[4] Another example is found in the gradual increase of deaf-mentally retarded children enrolled in special classes in residential schools, as reported in the January issues of *American Annals of the Deaf* since about 1955.

Changing population in still other types of residential facilities was noted as far back as 1958 by the U.S. Children's Bureau:

> Institutions with a tradition of serving "normal" infants, toddlers, and school-age dependent children are being urged to provide shorter term, more specialized care for . . . mildly or moderately disturbed children. . . . Residential treatment centers for disturbed children report communities are urging them to accept the more severely disturbed children. Training schools for delinquent youngsters are having the more aggressive, more disturbed child and a growing fringe of retarded delinquent youngsters committed to their care.[5]

Undoubtedly such changes make new demands on residential school programs, but they also open up new avenues of service, which, in some cases, can only be provided in residential schools.

Courtesy Chicago Public Schools

For this boy communication becomes possible through skilled teaching.

SOME local public school systems have long provided special education teachers for children living in residential facilities; others have begun this practice more recently. In 1963, about 70 of the 725 institutions that reported education programs said that some of their teachers were employed by a local public school system. These approximately 350 teachers represented 50 percent of the total teaching force in the 70 residential school programs. In addition, a preliminary review of the completed questionnaires returned by the local school systems shows that public school teachers were also teaching in other residential facilities than those included in this article. (The full report of the 1963 survey will include data on enrollments and teachers.)

A residential school in California enclosed a description of a program for emotionally disturbed children which was begun in the early 1950's by the Oakland public schools.[6] Its experiences, as shown in the following excerpts, may well be similar to others across the country:

Courtesy, Los Angeles Public Schools

For this girl education continues even in the hospital.

> One of the major contributions to the child welfare program in this area has been the establishment of a community sponsored treatment center for emotionally disturbed children. . . . The faculty and staff of the . . . nearest schools to the agency were taxed beyond their endurance, endeavoring to carry these sick children in regular classes. The problem

[4] John W. Jones, *Special School Programs for Visually Handicapped Children* (in preparation), U.S. Department of Health, Education, and Welfare, Office of Education.

[5] Martin Gula, *Child-caring Institutions, Their New Role in Community Development of Services.* Washington, U.S. Government Printing Office, Children's Bureau Publication No. 368, 1958, page 11.

[6] Janet MacLeod, *Planning for the Educational Needs of Children in a Residential Treatment Center,* Oakland Public Schools, 1956.

was intensified by the schools also serving another residential agency . . . which had adjusted its intake policy to accept emotionally disturbed children. The program devised included . . . facilities on the premises for those unable to gainfully attend a large, neighboring school.

It is the stated policy of the Oakland school system that school facilities be extended to all educable children, with flexibility in planning to meet these diversified needs. . . . It appeared not incompatible with this philosophy to extend educational services to these children whom the [neighboring] school felt unable to serve and who were institutionalized in one residence.

* * * * *

. . . There are now many children who have attended the residence school successfully, moved on to the neighboring school, and are now well functioning in the school and community in which they live. It is our belief that school services play an important part in the ultimate recovery of these children.

The scope of provisions made for socially maladjusted children by some local school systems is shown by an excerpt from a description of the Chicago special education program:

> The schools for socially maladjusted children are a combination of education, psychology, psychiatry, medicine, dentistry, and social service, coordinating and concentrating every effort on the maladjusted child. . . . A program of academic work on elementary and high school levels is operating in two day schools for boys and two for girls. An educational program is also in operation for delinquents in custodial institutions. . . .[7]

Teenage girls in homes for unmarried mothers are also counted among those served by special education teachers in local public schools. The Office of Education surveys have not provided a separate category for reporting these enrollments, but numerous "write-ins" on the 1963 questionnaires indicate that many special education departments were sending teachers into such residential facilities as the *Florence Crittenton Homes*, as well as into the girls' own homes. Some idea of the extent to which school programs may be reaching these girls was found in the 1960 Census of Population, which reports that about one-half of the girls between the ages of 14 and 17 in homes for unwed mothers were enrolled in school in that year.

Table 1.—Enrollment in school programs of public and private residential institutions for handicapped children and youth[1] in the United States: February 1963

Type	Number of institutions	Number of pupils
Total.....	725	111,138
Blind[2].....	54	7,558
Deaf[3].....	76	17,049
Socially maladjusted and emotionally disturbed.....	398	47,893
Mentally retarded..	222	38,638

[1] Does not include residential school programs operated by a local public school system. All data are preliminary and subject to minor changes.
[2] Includes some partially sighted children.
[3] Includes some hard-of-hearing children.

Current emphasis on expansion of community services for the mentally ill and mentally retarded may result in increased demands on the special education resources of the local schools. For some time now national studies and reports have been pointing to the need for increased local services. In 1961, the Joint Commission on Mental Illness and Health[8] urged rapid expansion of such facilities as clinics, mental health centers, psychiatric units in general hospitals, 24-hour emergency units, and residential treatment centers. Similar programs and facilities are described by the National Institute of Mental Health as being of "great promise" in helping meet the needs of the mentally ill.[9] And the report of The President's Panel on Mental Retardation says—

> This report is predicated on a strong conviction that the mentally retarded person should be served with as little dislocation from his normal environment as is consistent with the special character of his needs. Those needs should be met as close to his home as possible and in such a way as to maintain his relation with his family and peers.[10]

In each community, as the number and variety of facilities grow, so will the necessity for planning suitable school programs for the children and young people they serve.

SOME of the handicapped children reported in the 1960 Census are living in institutions whose primary purpose is educational. This is typical, for example, of residential schools for the blind and deaf. Virtually all children in residence are presumed to be in some type of school program.

Other handicapped children are living in institutions for medical, social, psychiatric, or other reasons. The 1963 survey of special education gives evidence of growing educational opportunities for such children. However, the progress that has been made toward reaching all who could benefit cannot be measured at this time, for studies now available do not answer a very basic question: How many of the socially maladjusted, emotionally disturbed, and mentally retarded children of school age living in institutions would be able to participate in even the most ideal school program—one adapted to specific needs and carried out by fully qualified teachers under competent supervision?

In the future it is likely that fewer and fewer boys and girls will find themselves living in institutions merely because community resources are lacking. There are some, however, who are best served by 24-hour group care at some time during their growing years. It is to be hoped that school programs of the institutions—and of the local communities themselves—will reach out to even more of these children and young people.

[7] *Children Exceptional* (brochure), Chicago Public Schools, 1959.

[8] Joint Commission on Mental Illness and Health, *Action for Mental Health*, Basic Books, Science Editions, Inc., New York, 1961.

[9] U.S. Public Health Service, *Facts on Mental Health and Mental Illness* (revised 1962).

[10] The President's Panel on Mental Retardation, *A Proposed Program for National Action to Combat Mental Retardation*. U.S. Government Printing Office, Washington 25, D.C., 1962. p. 163.

Home Economics Facilities

JAMES L. TAYLOR and JOHNIE CHRISTIAN

THE HIGH COST of construction and equipment, the rapidly growing school population, the technological changes affecting both building construction and equipment, and the ever-changing curriculum—all these present formidable problems to those who plan educational facilities for home economics education. But no matter how formidable the task, ample space, good equipment, and up-to-date teaching materials must be provided. They are, as both the general public and the profession recognize, important factors in updating teaching as well as learning, in promoting a carryover of education into life, and in increasing the pleasure and satisfaction which teachers and pupils find in their work.

There are usually some persons in every community and every State department who can make special contributions to the planning of home economics departments. Schools that make full use of such persons will increase the possibility of achieving satisfying results in meeting the community's immediate needs and in anticipating future needs. These are the types of persons generally available and eager to help:

—Local school administrators, because of their view of the total school program and the interrelationships existing between subject-matter fields.

—The home economics teaching staff, because of their understanding of program goals and ways of reaching them.

—Local school board members, because of their long-range view of the community's needs and financial situation, and because of their business contracts.

—State supervisors of home economics because of their firsthand experience in schools, both as teachers and supervisors, and their contacts with a variety of programs.

—Members of representative parent groups, because of their interest in their own homes and their interest in home economics as an education program concerned with improving family life.

—The State director of school plant services, because of his knowledge of State regulations and wide experience with school building programs.

—Outstanding pupils from both high school and adult classes, because of their experience in using classroom facilities.

—A building engineer, because of his knowledge of such practical problems as lighting, heating, sound control, and safety.

—A professional architect, because of his specialized training and knowledge.

The school is fortunate, indeed, if it can obtain the services of an architect who understands the programs and activities to be carried on in the home economics department and the relation between the physical plant and the instructional program. If school and community planners do their part, an architect with imagination and ability can incorporate their ideas into a functional building.

EDUCATION always reflects, to some degree, the spirit of the times. As changes occur in the school program, modifications in the physical environment follow. Today a number of trends apparent in education have clear implications for home economics education and facilities for teaching it. The first, and perhaps the most significant, is the trend toward growing enrollments.

Many communities can be prepared for increasing numbers of students by providing large classrooms from the outset, by building partitions that can be easily removed, and by making it easy to add a new extension or wing. If at least one wall in the home economics department is nonweight bearing and free of utility pipes, conduits, or ducts, remodeling and expansion will be easier. If, however, the department is hemmed in with barriers such as a stairwell, an auditorium, toilets, or some other construction, it will be difficult, if not impossible, to expand the space.

A second and unmistakable trend of the times in all aspects of education is toward increased flexibility. The subject matter taught, the people reached, the objectives sought, and the teaching facilities used are responsive to the needs of a growing and evolving society. Many schools are adjusting their programs to meet the needs of a greater variety of pupils. Schools are not only trying to reach the average and those who are college bound, but also trying to provide for the slow, the unusually gifted, the physically handicapped, the mentally retarded, the culturally deprived, and the vocationally inclined. Programs provide opportunities for pupils to learn in class and out of class, to work sometimes alone and sometimes with groups of varying sizes. Pupils go into the community, and the community comes into the school, and no one pattern fits all situations.

A third trend is toward functionalism in both programs and facilities. Good education has always been considered functional, but today vocational education is extending its goals into broader fields as it becomes more closely related to the realities of life. One result is that preparation for the

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world of work is now widely accepted as a goal in home economics, so much so that such preparation is supported by the 1963 Vocational Education Act.

The program includes wage-earning occupations based on home economics knowledge and skills. As the school program is modified to meet the new goals and as it reaches a greater range of pupils, provision for new space and a variety of facilities will undoubtedly be needed. These will include space for individual study and investigation such as nooks or carrels and space for a variety of group activities.

The trend toward increased use of mechanical teaching devices in instruction is apparent in home economics. Technology has increased the variety and improved the quality of teaching equipment. In addition to films, slides, and filmstrips, teachers are using overhead projectors, tape recorders, television sets, and teaching machines for programed learning. The outlook for further development of mechanical teaching aids is promising, particularly if education is to be adjusted to meet the individual needs of a great variety of pupils. If space and facilities in the home economics department are conducive to the use of audiovisual aids, both teachers and pupils will have opportunity to do better work.

Some of the changes being made in instructional methods are particularly adaptable to home economics programs. One of these is team teaching. Boundaries of subject-matter fields are shifting, and courses are being developed and taught cooperatively by two or more teachers representing different fields. Such cooperation is illustrated where economics and home economics combine their resources to teach consumer education. Home economics, which draws upon many disciplines, offers numerous possibilities for developing cooperative units of work. The success of such units may in large measure be determined by the location of rooms in the building, room arrangement, and space for groups of teachers to work together.

THE kind of physical facilities used in teaching home economics is affected not only by trends and new ideas in education as a whole but also by developments occurring in this specialized field. Home economics education is particularly sensitive to changes and conditions affecting homes and families. Programs are concerned with food, clothing, shelter, child development, family health, and recreation. Through these phases of the program run certain threads of consumer education, management, and human relationships. Some of the more clearly defined directions toward which home economics appears to be tending suggest that these threads will be strengthened in the future.

Consumer problems are receiving larger and larger proportions of time in the curriculum. This emphasis may be caused in part by the increase in family income, some of which is contributed by women who work outside the home and therefore have more money to spend. But there are also other causes, among them, the new products coming out of our changing technology, the expanding teenage market, and the almost inescapable pressures to buy. In addition to the emphasis on expanded income there is emphasis on helping low-income families deal with problems of buying. Facilities for dealing with the consumer phase of home economics are needed in each laboratory since every area of the curriculum touches on the consumer problem.

Demands on time, energy, and human resources are increasing in every home. In some the increase results from women's working outside the home and participating in community life. Such women are finding it necessary to plan for the use of their resources with greater care. Moreover, when women take jobs outside the home, the children often assume more responsibility, which means a shift in management. To meet this situation, the home economics curriculum, whether keyed to young people or adults, is giving added emphasis to management. This emphasis will produce better results if the teacher has the facilities she needs to illustrate good management principles. Moreover, good facilities encourage both teachers and pupils to experiment and to work out efficient management practices.

The stress to which modern families are subject increases the need for each member to understand how to maintain good relations with the others. Every program in the home economics curriculum offers pupils an opportunity to deepen their understanding of human relations. For example, the preparation and serving of family meals, the care and development of children, the allocation of money to meet the family clothing needs—each of these has a bearing on the quality of relationships that are found in the home. Good teaching facilities can help pupils meet and solve problems in human relations and help them see the place of such facilities in their own homes.

IN many communities the school is an important center of activity. In such communities the home economics department may become the meeting place for groups of young people and adults, a source of information for families who are planning new or remodeled homes, and a demonstration center. Some departments welcome families—mothers and fathers—interested in seeing how specific equipment works and how some furnishings and finishes hold up under use, or in trying out arrangements of space.

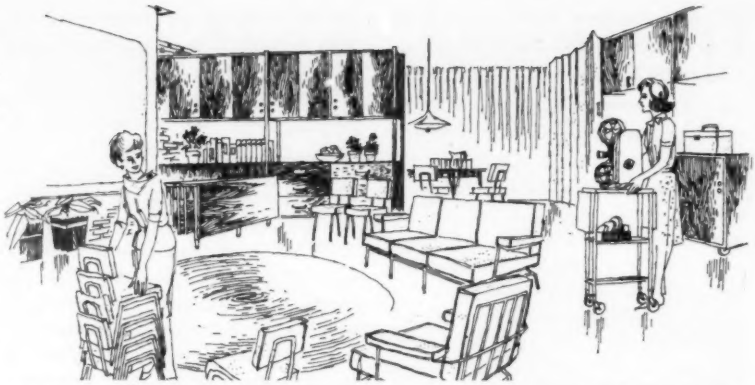
The department can be used to demonstrate a variety of ways to achieve satisfactory and aesthetic effects in the home. Since the most expensive item does not necessarily represent the best taste or give the most satisfactory performance, the department can illustrate variety in choices and in price range. It can also illustrate some standards which are attainable within a modest income and some technological developments which can lighten the task of homemakers.

In some small high schools with one home economics teacher, a single room may be used for teaching all phases of the program. In this case, the room should be equipped for this purpose. If, however, there are indications that more than one teacher will be needed in the near future, it is desirable to provide more than one room at the outset. Regardless of the number of rooms in a department, it is important to plan so that each room can be used for teaching more than one phase of the curriculum. The following paragraphs suggest arrangements in a three-room department.

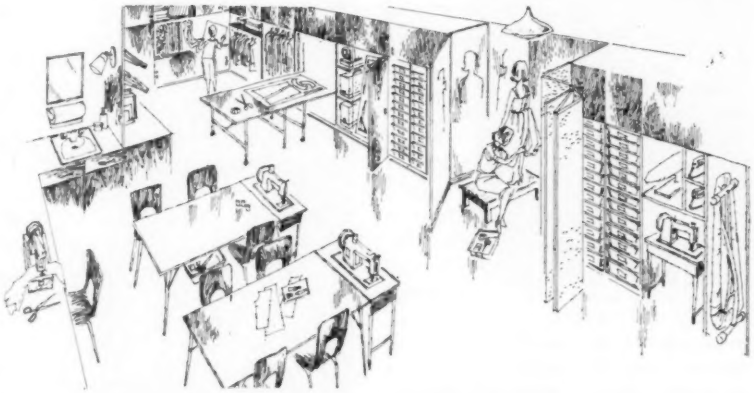
The first room can be arranged to emphasize family living, but it should be so located in relation to other rooms in the department and to storage space that equipment will be available for teaching units in housing, home furnishings, care of a convalescent in the home, child development, home management, and family relations. Easy access to the food preparation area, facilities for using visual aids, mobile storage cabinets, and uncommitted floor space can increase the uses to which the room can be put.

The second room can be designed to give emphasis to the food and nutrition aspects of the curriculum. It cannot have the same flexibility as the first room because of the need for such large, heavy equipment as a refrigerator, range, dishwasher, disposal, and wall cabinets. By limiting the number of such heavy pieces through the use of some mobile models and by locating all heavy, nonmobile equipment around the wall, schools provide for some flexibility and make the room adjustable for teaching units in child development, laundry, home management, housing, family economics, and family health.

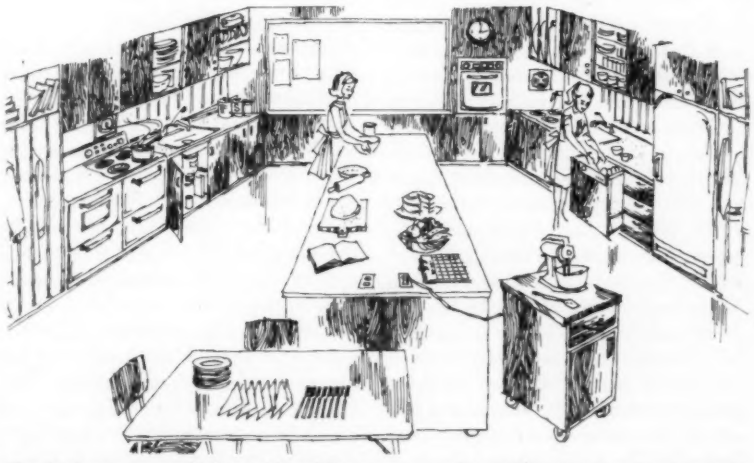
The third room might be planned to emphasize the teaching of various aspects of textiles and clothing, but it too can be adjusted to teach more than one phase of the program. If the major floor area is free from heavy or permanently fixed equipment, and if portable cabinets and sewing machines can be brought in when needed, the room can be adjusted for use in teaching such units as housing, home furnishings, health, management, family relations, and child care.



In a 3-room department the living room can be arranged to accommodate discussion groups.



The second room can be planned for textile and clothing units but used for other units.



The third room, a unit kitchen with mobile counters, can be used for classes in home management, laundry, and other units of the program.

IN planning facilities for a program in home economics, a special committee will find certain guidelines useful. The ones mentioned have been used successfully in many communities.

Cooperative planning, which involves school administrators, architects, and those who use the home economics department, is very important. The architect should become as familiar as possible with the department. To do so, he needs assistance from teachers, supervisors, and others concerning the use that will be made of the facilities.

Committees are needed to plan home economics departments as a part of the total building program. After studying the literature in the field and visiting new and remodeled facilities, a committee can make a report of its findings and recommendations that will be a valuable guide in planning. The architect should have a description of the pupils to be taught, their needs, and the typical instructional courses and activities that will be offered in the program. This document, known as "educational specifications," can guide the architect as he draws plans for the department. Competent school architects welcome the assistance that comes from well-developed specifications, for these enable him to be creative and therefore to be most helpful in making a constructive program possible.

Competent leadership, which is essential in good planning, may come from inside or outside the school system. In many communities schools profit from using consultants and supervisors in school buildings and supervisors of home economics from State departments of education.

Other important factors in successful planning include the following: (1) Providing an efficient planning committee with plans for work, (2) setting up a convenient place and time to work, (3) using democratic procedures, (4) securing broad representation from all groups that can make a special contribution, (5) working through constituted authority, (6) keeping the public informed, and (7) reaching conclusions and recommendations based on facts.

The furnishings, equipment, space arrangements, and finishes used in the home economics department may reach beyond the school and will influence the standards that homeowners of the community set for themselves.

To help meet the physical needs implied in the trends in curriculum discussed here, planners may profit by keeping the following suggestions before them as they work toward new or remodeled facilities.

- Design space and facilities to help teachers do a specific job keyed to the needs of contemporary life.
- Provide space and equipment that can be adjusted and adapted to a flexible program.
- Plan the department so as to give a friendly atmosphere.
- Locate and arrange rooms that will encourage teachers to cooperate in planning and working together.
- Plan for use of audiovisual aids.
- Provide, if possible, accessible and convenient outdoor space to give an atmosphere of flexibility and a homelike situation.
- Condition the department for comfortable and safe working.
- Provide adequate and convenient storage for equipment.

FACILITIES are tools for learning. If the home economics facilities are attractive, they can aid pupils as they work alone, in pairs, in small groups, or in classes. The characteristics and needs of pupils to be taught—whether elementary, junior high, or senior high pupils or adults—are important considerations in planning school facilities.

Seven Who Came Back

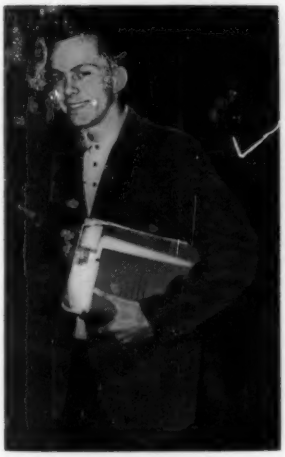
COURAGE, determination, and commonsense often characterize the young people—and sometimes the not so young—who return to school after dropping out before high school graduation. Their returning in itself is a tribute to their character. But credit for their return must also be given to the schools and communities who wisely provide an opportunity for the dropout to avoid the ills that beset the uneducated man. The dropout returns of his own volition, but without the efforts of the school and the community he would not have a second chance.

The campaign conducted in the summer of 1963 to cut down the dropout rate brought good results. The Office of Education estimates that about 51 percent of 59,300 actual and potential dropouts contacted during the campaign returned to school in the fall of 1963. The campaign was sparked by President Kennedy, who made $250,000 from his Emergency Fund available to 63 communities in 23 States and the District of Columbia for a major effort to reach dropouts and potential dropouts. Many communities conducted campaigns in the summer just past through their own resources. The Office of Education has no estimates of how many students were influenced by this effort, but reports from individual communities indicate the results are good.

Every one of the thousands of students who return to school or who are dissuaded from dropping out has a story to tell. Here are seven of these stories, sent to *School Life* by counselors in six communities (one community sent two). They are not presented as typical stories but only as examples of the results of some activities in a few communities.

Andrew Kennedy of Marion Senior High School, Marion, Ind., is a former dropout who is making good in school and wants to share the satisfaction of

Six of the seven who came back: *Upper left*—Loralee Nojd; *lower left*—Mike Griffin (with a school counselor); *upper right*—Andrew Kennedy, Catherine Rios, and Shirley Washington; *lower right*—Michael Biros. A picture of the seventh—Frank Cantu—was not available.



returning with other dropouts. He is in his junior year and is a class officer. Yet a few years ago Andrew was not interested in school and to all appearances was a poor student. He thought he wanted a job and money, so he dropped out of school. Disillusionment came fast. He found that the jobs open to an uneducated boy pay poorly and are deadend streets. He soon realized that to get ahead in the world he needed an education.

The first suggestion that he return to Marion High School came from a friend, a good student. At first he didn't take the idea seriously, but with the encouragement of his parents and the assistant principal of Marion High he returned to school last year.

When he returned to school Andrew was 20 years old. One of his principal misgivings was that he would not fit in with much younger boys and girls. To his surprise, he found that his classmates accepted him and that he made new friends easily. He is a good student now, enthusiastic about school. His present ambition is to be a teacher.

Andrew's enthusiasm has led to positive action on his part to help other dropouts or potential dropouts. With the sanction of the school and the help of a school social worker he and other students have formed a committee called RODS (Re-Opening Doors to Students). Andrew is happy to note that this year Marion has more older students than usual, some of whom are returned dropouts. He gives much credit for the success of the school's dropout activities to the school social worker.

In Andrew's words, the dropout is "only a hand away," and he is trying to extend a hand to every dropout and potential dropout he can reach in or through his school.

Loralee Nojd of Queen Anne High School in Seattle, Wash., was dismissed from school in 1963 because of excessive absences. Her grades were low. There seemed to her to be no reason for studying. Her record of poor attendance, lack of interest, and poor social relations dated back to kindergarten.

"I was flunking every subject and falling farther and farther behind," she is frank to admit. "I blamed my failure on the teachers and the school. I didn't feel well and was self-conscious. I missed a lot of school, pleading illness. I found myself comfortable only with other poor students. We kept criticizing the school. One by one my friends dropped out."

For a while after she left school Loralee worked as a waitress and babysitter, but it was not long before

she realized that the experience of such employment was more frustrating than school. She wanted to return to school, but thought that her dismissal was final.

When Loralee heard of the dropout campaign in 1963 she got in touch with a school counselor who soon dispelled her fear that the school would not accept her again. Once she had returned her life changed. She lost weight, began to feel better, and found that her outlook on life had greatly improved. Her grades have been good. Her ambition is to join the Waves after graduation and eventually to become a member of the Peace Corps.

Loralee says she believes that many young people drop out of school not because they lack intelligence but because they have acquired the wrong attitude. "But nothing changes the attitude of a dropout like dropping out. When I returned to school, study no longer promised to be a bore because I had learned the value of education. Before I had not thought about it, but now I am mature enough to realize what a fool I had been."

Mike Griffin of Southwestern High School, Flint, Mich., a returned dropout, will graduate with his class next June. It is true that he will not receive his diploma until August when he has completed credit requirement in summer school, but he will have had the satisfaction of being on the platform with his classmates during the ceremonies.

Mike was suspended from school last year because of misconduct. His marks were barely passing. During the dropout campaign last year a school counselor talked with Mike. Between them they reached an agreement. Mike, on the counselor's recommendation, would have a job provided he attended two classes every day. He has lived up to his part of the bargain.

A shy boy, Mike is working for a butcher and wants to become a butcher himself. To the counselor's question, "Can you cut pork chops yet?," Mike replied, "No, I'm still on hamburger."

But Mike's counselor believes that he will soon be graduated from hamburger and even from pork chops, just as he will be graduated from high school next summer.

Catherine Rios and Shirley Washington of the Los Angeles public schools left school because of family problems.

Catherine had to leave because family financial conditions forced her to support herself. But the kind of work she found—babysitting and housework—hardly paid for her barest needs. A counselor employed by the Back-to-School Program of the Los Angeles schools got in touch with Catherine to discuss further training for her with the city's Youth Opportunity Board. Catherine consented to give the program a try. She is now studying business machines, typing, and filing, and has obtained a part-time job.

A big change has come over Catherine. Once she was lacking in self-esteem. Her success in the training program has made her, as she says, grow as a person and has given her insight into herself.

Shirley dropped out of school because of a difficult home situation. Shirley was not physically well, and she used ill health as an excuse to stay out of school. But the help and encouragement of a school counselor have changed her outlook. She has returned to school and has learned to accept and to live with her situation.

At first Shirley resented the visit of a field counselor and the questions the counselor asked. But she came to realize that the school was genuinely interested in her welfare. Once she had no faith in her ability to graduate, but now that she has returned to school and her schoolwork has improved, she is looking forward to graduation. Her future plans include working at a hospital, on the counselor's recommendation.

Michael Biros of Central High School, Providence, R.I., dropped out of school in 1963 because he had dreams of becoming rich. Michael thought that all he needed was a job and a little time. He worked for a while as an attendant at a drivein theater and as an odd-job painter for a friend. The first job was tedious and poorly paid; the second paid well one week, poorly the next, depending on business. His expenses mounted, and his dreams of getting rich faded fast. One thing was clear to him—he needed to complete his education.

When the school counselor called Michael to discuss the advantages of returning to school, he was ready. He is happy now to be back at Central High School. He strongly urges every boy or girl thinking of dropping out because of the lure of paid employment to give the matter serious consideration. From his own experiences he warns against the belief that highly paid and rewarding employment is waiting for the dropout.

Frank Cantu of San Antonio, Tex., realized his ambition to complete his high school education last August at the age of 31. He didn't return to the school he had left years before but took up his studies through San Antonio's part-time and evening program. It took him 6 years.

Mr. Cantu had to leave school in the 8th grade in order to support himself. For years he worked at odd jobs and served in the Army, including 18 months in Korea. Six years ago he moved to San Antonio, became an employee of Fort Sam Houston, and entered the part-time and evening school program.

Having attained one educational goal, Mr. Cantu has set another for himself—to learn drafting. He plans to enter San Antonio College next January.

WHAT THESE SEVEN returned dropouts make of themselves—what all returned dropouts make of themselves—what they contribute to America will be a fitting tribute to the late President and to his faith in education and in men.

The Nongraded School

Is There Magic in It?

STUART E. DEAN

HARDLY a week passes that we do not hear of one or more schools—usually elementary schools—that are abandoning the graded pattern of organization, at least at the primary level, and adopting instead a nongraded pattern.

Are the days of the graded schools numbered? The graded school has been a model ever since 1848, when James Philbrick set up the Quincy Grammar School in Boston, Mass. Philbrick, like all school administrators before him and since, was looking for some sort of administrative framework that would provide in an orderly way for large numbers of children and teachers; and the one he finally settled on was based on the persuasive logic of chronological age. He classified his pupils primarily by the number of years in which they had been enrolled in school, and he measured the years by grades—the first grade for the first year, the second for the next, and so on.

Discontent with the graded school began early, as soon as students who couldn't keep up with their classmates began to pile up at the various levels. From time to time during the 116 years since Philbrick set the pattern, waves of disenchantment with the graded school have swept the country; and other forms of organization have been briefly experimented with. The present movement toward a nongraded system, however, is more serious and more widespread than any of the previous efforts to find an organizational structure that would be highly responsive to the needs of individual children.

It is doubtful that Philbrick was aware that he was setting a style. But it is certain that he intended his organizational structure to serve two purposes: To make the administrative operation of his school smooth and efficient and to provide a setting in which the best possible instruction could be given. And it is probably equally certain that he would have been surprised, could be have looked into the future, that his pattern would be used in such a way that it regimented children in lockstep formation and put a premium on conformity and inhibited the individual child from expressing himself.

The fact is that a school needs both system and flexibility—system for handling the mass and flexibility for working with the individual. That is to say, it needs two different kinds of structure—one for administrative operation and one for instruction. But the one must always be subservient to the other. No one needs to be reminded that the schools were created for one purpose—to instruct—and that any operational structure proves its worth only in the degree to which it creates, supports, and encourages an effective instructional program. A school's merit is not to be found in the central administrative office but in the classroom, where teachers teach and pupils learn.

Any school in which operational structure is considered an end in itself is on the wrong course. Here we have the key to the failures laid at the door of the graded school. Conceived as a purely administrative device to aid school operation, it has been trapped into becoming an end in itself and, as such, has limited rather than aided instruction.

What our school people are looking for, obviously, is a form of organization that will be a friendly medium both to administrative system, which imposes limits, and to the development of the human mind, which knows no limits at all. It may be that no such form exists, or that no such form can be ever devised; but surely some way can be found that will permit a school to run efficiently and at the same time have the flexibility it must have if it is to attend to each child as an individual.

Is the nongraded school the answer?

The nongraded school goes by several names—ungraded school, primary unit, continuous-progress program, and multiaged school. But no matter what name it bears, the nongraded school in its simplest form is nothing more than a school that has eliminated grade barriers. It focuses attention on how well a child is doing in terms of his own ability and stage of development, not in reference to a particular grade level.

So far, experimentation with the nongraded system has been limited mostly to the primary school level, and most of the evidence of its efficacy has been gleaned from the "nongraded primary unit." Lately, however, there have been signs that the movement is extending to all school levels: scattered examples can now be found in the intermediate grades and even in a few secondary schools.

Basically, the nongraded school is not a new method of teaching or a different way of running a classroom. It is only an operational type of structure, but it does leave children room to grow in without hitting their heads on artificially imposed ceilings or suffering from unreasonable pressure to advance in prescribed directions. And within its framework teachers are free to deal with the virtually limitless range of abilities that exist in every classroom.

Most of the schools that are trying nongraded systems are doing so in a

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serious effort to strike a proper balance between operational structure and instructional purpose.

Growth of the movement

Many persons think of the nongraded school as a totally new idea, but it is, as I have said, anything but that. In fact, it has some of the merits of the good one-room rural school, which some persons even today believe was a high-water mark in American education. The teacher who held together the assortment of ages and grades in a one-room school was taking advantage of an excellent opportunity to follow a highly flexible, almost fluid, style of operation.

The first program of nongrading in the primary grades now in existence, is the one in Milwaukee, adopted in 1942. The second is in Appleton, Wis., adopted in 1947. From these beginnings, the adoption of nongraded units has become a movement, which spread slowly at first but which now has become so strong that no one is able to keep a current and reliable count of the total number.

Reports to the Office of Education at the present time show that the movement is reaching into the secondary school, but so far the increase there is slight.

How does it work?

The "nongraded primary unit" usually combines grades 1, 2, and 3 under one teacher. Some schools combine the kindergarten and grades 1, 2, and 3; a few combine grades 1 and 2 only. Children in a nongraded primary unit are identified by the name of the teacher. No reference is made to "grade." The teacher and group remain together for the length of the program.

In the unbroken setting of the nongraded program the teacher has more time in which to guide, lead, and shape the progress of her pupils. She does not have to worry about attaining fixed levels or keeping every pupil at the same level of growth and progress. She can recognize, adjust to, and respond to the range of individual differences in her pupils. Learning is no longer a prescribed series of exact rules to which she must adhere, and she has a wider range of materials at her disposal.

Of course, even so liberal a structure as that of the nongraded school will not solve the problems of all children. Some may require more time than the 2 or 3 years allotted to the program. But with a more elastic period of time in which to absorb some of the variabilities of the classroom and stabilize the lagging child's rate of learning, there should be fewer cases of children who cannot keep up. On the other hand, some children may be able to move faster than their classmates, but indiscriminate advancing is not always wise. With more information at hand in the nongraded school, the teacher can make a more thoughtful decision as to the child's best rate of progress.

The purpose of the nongraded secondary school is much the same as those of the nongraded elementary school—to educate the individual to his full potential. But its administrative problems are larger and more complicated. The secondary school's program is more varied and comprehensive than the elementary school's. Techniques and devices in the two schools differ.

The experience of the Middletown, R.I., High School is a good example of the results of a nongraded secondary school. Of its program, an official has this to say:

"In the Middletown High School no one fails, because each pupil is permitted and encouraged to learn at his own pace. The content of the curriculum in each of the subject fields has been organized into sequential steps. Each new semester each pupil begins at the point he had reached in the curriculum sequence during the previous semester. . . . To make possible this flexible pace for each pupil, pupils are evaluated separately in terms of quality of learning and quantity of learning. These and other ideas have created an atmosphere . . . in which the recognition of individual differences results in opportunities to do something about them." [1]

But Middletown, as it readily admits, has many unsolved problems. It still has not found complete answers to such questions as how to integrate subject fields or how to use large group instruction effectively. It needs automatic data processing facilities and assistance, to perfect ways of evaluating pupil achievement, and to establish good inservice programs for teachers.

Some of the problems

The still unresolved problems of Middletown point to the need for caution when a school system is considering adopting a nongraded plan. The adoption of a nongraded plan involves endless details of planning, initiation, and execution. To begin with, a system must determine whether such a shift is warranted. The first danger is the temptation to jump into a nongraded program without having worked out all details. A changeover must only follow the most careful investigation and planning. All planning must include school staff members and the community. Without the support of these people, a program's chances for success are poor.

Before moving to a nongraded plan school officials must have firm and sound policies for reporting progress, communication between levels, curriculum changes, pupil mobility, record keeping, and teacher qualification.

Reporting progress.—The nongraded school must have a sound policy for reporting pupil progress to parents. Reporting to parents has always been difficult, of course, whatever system a school follows, but the nature of the nongraded school makes reporting even more difficult. Parents used to a graded system are disturbed by so drastic a change.

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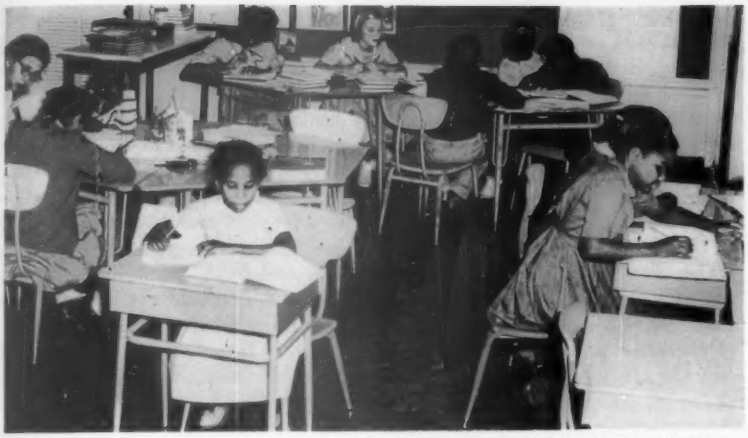
[1] Sidney P. Rollins, *The Middletown Project: The Development of a Nongraded Secondary School*, Providence, R.I., Division of Graduate Studies, Rhode Island College, 1962.



HAMPTON INSTITUTE LABORATORY SCHOOL, HAMPTON, VA.

Grouping within the classroom is flexible in a nongraded school. Children work together or alone as necessary. In this classroom the age range is 8 to 11 and the achievement at the 3d to 6th grades. The size and arrangement of furniture aid flexible grouping.

Coordination between levels.—As a school system experiments with nongrading at different levels it faces the problem of internal coordination. Special problems arise when children leave a nongraded unit to go into a traditional school, or vice versa. Some children may have to be reoriented. The school must anticipate such problems and be ready to meet them.

Need for "levels."—Experience so far in the nongraded school points to a continuing need for some definition of "level," based on accomplishment, quantitative expectancy, or both, to replace "grade." According to Goodlad, most nongraded schools "simply seek differentiated progress for learners through subject-matter sequences which are relatively common for all. This is a step forward, and, with the weight of educational machinery to be moved, perhaps all that can be reasonably expected for the 1960's." [2]

Many nongraded elementary schools continue to rely on a series of reading levels as a measure of pupil attainment. The number of levels varies considerably; one school system has 11 levels for the first 3 years; another has 20; most have about 7 or 8. Many educators are surprised to learn of the use of specific reading levels in a nongraded school. It seems to them as though a new term "reading level" had simply replaced the old term "graded." But this is not necessarily so. Nongrading as practiced by some schools often leaves something to be desired. Very few schools are entirely nongraded. Progress today is only a beginning step in an evolutionary development.

Curriculum changes.—One of the lessons to be drawn from the early experience with nongrading and its significance for the future is its effect on the curriculum. The most evident need is for specifying and defining curriculum structure. Grading has permitted us to evade the issue. But with nongrading, we are coming to realize that the true test of educational merit lies in the responsiveness of education to the range of human variability. We can now assess the value of curriculum in use against the needs of the time. Although nongrading gives some promise of easing administrative restrictions, its greatest potential may be realized in the advancement of curriculum.

Pupil mobility.—Can a nongraded system be successful where there is a high degree of pupil mobility? There appears to be no reason to doubt that it can. Because instruction is individual, a pupil can enter or resume at any time and take up his work at his point of attainment. A pupil transferring from another school is assigned to a group on the basis of the usual factors, such as age and past record. His teacher adjusts his program to an analysis of his skills and accomplishments. In secondary school particularly a pupil who has fallen behind will no longer be frustrated by the lost motion of riding out the close of a school year knowing he

NEWTON PUBLIC SCHOOLS, NEWTON, MASS. WILLIAM WINSTON, PHOTOGRAPHER

In the nongraded school the teacher ascertains the degree of individual growth in reading skills at an individual conference.

[2] John I. Goodlad, "Promising Practices in Nongraded schools," *Midland Schools*, 75: 15–16, May 1961.

has already failed a course and must start over next semester.

Record keeping.—Nongrading will not work without efficient methods of record keeping or progress reporting. But this necessity places a very heavy burden on the teacher, who is responsible for reporting evidences of growth and progress for each child and for projecting directions and needs. School systems practicing nongrading report that they need improved and refined processes by which to build a comprehensive educational history of the child. Traditional cumulative record procedures, even when highly developed, may not meet the need. Nongraded schools need more immediate, accessible, flexible, and usable techniques than those now in use. In due time, developments in electronic data processing may help schools to meet this critical need.

The teacher.—The nongraded school does not of itself guarantee or even promise improvement in instructional practice. It *may* provide for a more realistic setting for meeting the changing educational needs of the day. It *may* provide for a more flexible framework and a more favorable climate for better teaching. It *may* lead to the strengthening and updating of curriculum. It *may* result in a more vigorous realization of the ideals of democratic education. It *may* help to bring about quality education in our country. It *may* do all these things or some of them—or none of them. After all, the philosophic concept of nongrading is at best nothing more than a catalyst for better schools. Responsibility and opportunity for effecting improvement rest *with the teacher.*

Let there be no illusions that teaching in a nongraded school is easier or less demanding. In fact, the reverse is probably true. To treat each child as an individual in a large class is no small undertaking. It is an almost unbearable responsibility.

To meet the demands of the program there is certainly a need for changes in preservice and inservice programs for teachers. Some teacher preparation programs will have to be strengthened on these points: Understanding individual differences, ways of individualizing instruction, diversified use of materials, and flexibility in planning. If nongrading can free teachers of administrative restrictions, can foster the spirit of creativity and experiment, and can establish a climate of excitement and challenge, then we are indeed in for an era of successful educational innovation. It is true, of course, that administrative practices sometimes affect the quality of teaching, but the degree to which nongrading removes these obstacles will be another measure of its worth.

Results so far

It is too early to say flatly that the nongraded method is a success—or a failure. Not many *truly* nongraded schools exist. This is a period of transition before a full-scale trial of nongrading. We cannot press for conclusive evidence of success or failure at this time. We need much more information on what has been accomplished. Those hoping for spectacular gains or that our educational ills have been solved in one move are likely to be disappointed.

The experience of many of the schools experimenting with nongrading has been good. Middletown's endorsement has already been mentioned. The Melbourne, Fla., High School reports good results. Its dropout rate has dropped to a low of 4 percent (the national average is about 33 percent) and the number of its graduates going on to college has risen from 40 percent to 70. Among elementary schools, the success of the Appleton, Wis., school is outstanding. "In 1956 children in their first year of intermediate school exceeded the national norm in total achievement by 6 months. In 1957, the same group increased its margin to 7 months; and in 1958, before entering junior high school they were a full year and 1 month above the national median." [3]

Not all reports, of course, are glowing. Nor do the results of all investigation agree that nongrading is a good practice. But practically all investigators, whether they are warm, lukewarm, or cold to the idea of nongrading agree that the success of the plan is determined in the classroom.

From all that has been said and written about the nongraded school by educators and researchers, the following list is representative of the pros and cons. Some items are subjective and should not be considered as valid or conclusive.

Pro.—These are some of the reasons given for considering the nongraded school as desirable:

1. It recognizes and provides for individual differences among children.
2. It offers flexibility in administrative structure.
3. It abolishes the artificial barriers of grades and promotion.
4. It permits the pupil to progress at his own rate.
5. It promotes improved mental health in teacher and pupil.
6. It respects the continuity and interrelationship of learning.
7. It stimulates major curricular revision.
8. It is in harmony with the educational objectives of a democratic society.
9. It is administratively feasible for all levels and age groups.
10. It is program oriented, not operationally controlled.

Con.—These are some of the reasons the nongraded school is not considered desirable:

1. It leads to soft pedagogy; lacks fixed standards and requirements.
2. It places an impossible burden on the teacher.
3. It replaces grade requirements by reading levels.
4. It results in a lack of information on pupil progress to parents.
5. It is difficult to put into practice because teachers are inadequately and insufficiently prepared.

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[3] Arthur D. Morse, *Schools of Tomorrow—Today,* New York; Doubleday and Co., Inc., 1960.

6. It does not have minimal standards for all children.

7. Its curriculum sequence tends to lack specificity and order.

8. It is only an improved means to an unimproved end.

9. It does not guarantee that improved teaching will result.

10. It suffers from widespread misuse and even abuse of the term "nongraded."

Goodlad and Anderson sum up the case for the nongraded school thus:

"The facts and theory that suggest the kind of elementary school we advocate are largely a product of the twentieth century. The circumstances that led to the elementary school we would abolish were characteristics of the nineteenth century. We believe that research on human development, learning, and curriculum now available to educators, points to a nongraded type of elementary school organization." [4]

[4] John I. Goodlad and Robert H. Anderson, *The Nongraded Elementary School*, New York, Harcourt, Brace and World, Inc., revised edition, 1963.

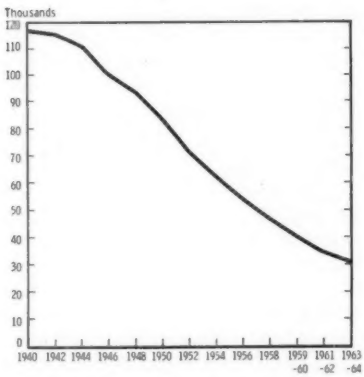
Statistic of the Month

Local School Systems, by Size of Enrollment: Fall 1963

More than one-fourth of the 40,200,000 public school children in the United States in the fall of 1963 were enrolled in 143 large school districts with 25,000 or more pupils each; and more than half, 54 percent, in 1,200 districts with 6,000 pupils or more. The other 46 percent of the children were enrolled in 26,600 school districts, ranging in size from fewer than 300 to 6,000 pupils. The 15,600 very small districts with fewer than 300 pupils enrolled 3.7 percent of the total number; 2,700 districts with 300 to 600 pupils, 2.7 percent; 3,200 districts with 600 to 1,200 pupils, 6.5 percent; 3,500 districts with 1,200 to 3,000 pupils, 16.3 percent; and 1,600 districts with 3,000 to 6,000 pupils, 16.4 percent.

Not all school systems operate schools. There were 3,942 nonoperating districts in 1963. These school districts either did not have any children of school age or sent their pupils to another district, usually on a contractual or tuition basis. The number of nonoperating districts is decreasing, in some States because of State laws.

The total number of school districts (operating and nonoperating) has been decreasing rapidly—from 117,100 in 1939–40 to 31,705 in 1963–64, as a result of reorganization, consolidation, and elimination of 1-teacher school districts. Across the country pupils are benefiting from the reorganization as the larger school districts offer greater opportunity for expanded and enriched educational programs.—Rose Marie Walker, educational statistician, Office of Education.



Number of local basic administrative units (school districts): 1939–40 to 1963–64.

Number of local basic administrative units (school districts): 1939–40 to 1963–64

School year	Number
1939–40	117,108
1941–42	115,493
1943–44	111,383
1945–46	101,382
1947–48	94,926
1949–50	83,718
1951–52	71,094
1953–54	63,057
1955–56	54,859
1957–58	47,594
1959–60	40,520
1961–62	35,676
1963–64	31,705

Source: U.S. Department of Health, Education, and Welfare, Office of Education, OE–10024–64, Digest of Educational Statistics, 1964 Edition, and OE–20007–63, Fall 1963 Enrollment, Teachers, and Schoolhousing in Full-time Public Elementary and Secondary Day Schools.

Distribution of local school systems and enrollments by enrollment size of system, for the United States: Fall 1963

Enrollment size	Number of systems	Percent	Enrollment	Percent
Total operating systems	*27,763	100.0	40,217,215	100.0
25,000 or more	143	.5	10,790,900	26.8
12,000–24,999	293	1.1	4,788,300	11.9
6,000–11,999	774	2.8	6,304,300	15.7
3,000–5,999	1,599	5.8	6,603,900	16.4
1,200–2,999	3,522	12.6	6,561,300	16.3
600–1,199	3,210	11.6	2,600,100	6.5
300–599	2,663	9.6	1,070,300	2.7
Less than 300	15,559	56.0	1,498,115	3.7

*Does not include 3,942 nonoperating districts.

Source: U.S. Department of Health, Education, and Welfare, Office of Education, OE–20005–64, Education Directory, 1963–64, part 2, Public School Systems.

Searching for Quality in Secondary Schools

OVID F. PARODY

CONTEMPORARY developments have placed the university academic scholars in a new leadership role in American education. In contrast former developments had established schoolmen (professors of education, administrators, and teachers) as leaders in public education.

Historically these two groups have been operating in different educational milieus which have paralleled each other. Interaction has been infrequent and sporadic. Each group has a concept of quality in education which grows logically out of its own operational context: The college campus and the public schools. As a result, the situation is muddled. The concepts of the scholars provide little guidance for the schoolmen as practitioners; nor do the scholars experience the difficulties of the schoolmen.

If the two groups are to see education as a whole and to formulate policies which will serve local, State, and national interests well, their thinking will have to be integrated.

It is possible that such integration might grow out of a dialog between scholars and schoolmen. In the paragraphs below I suggest a direct confrontation of the two viewpoints which indicate the nature of the dialog that I believe is needed. In such a dialog scholars and schoolmen might agree on a broader definition of quality than either now accepts, a definition that would provide guidance for leaders at different levels and for different functions.

Last month, in the first of two articles on quality in secondary education, Dr. Parody discussed the social developments that have influenced education and indirectly led to conflict between schoolmen and university scholars. In the article below he calls for a confrontation of the two groups on some of the specific issues dividing them and suggests the general direction the school might take in moving toward better schools.

Dr. Parody is chief of the Secondary School Organization Section, Office of Education.

Confrontation

1. *Leadership: The university scholars versus the professors of education and schoolmen.*

SCHOLARS: Isn't it essential for the university scholars to provide educational leadership if we are to close the dangerous gap between what is known and what is taught? How can schoolmen maintain scholastic depth during this period of accelerated growth in knowledge?

SCHOOLMEN: If university professors enter the field of elementary and secondary education in a leadership position after an absence of over 60 years, how will they affect existing roles, functions, and relationships? How can working relationships be coordinated and unified with proper regard for authority and responsibility?

2. *Purpose: Intellectual development versus wholesome growth.*

SCHOLARS: Isn't the school attempting the impossible when it attempts to deal with all aspects of behavior? And isn't it infringing on other institutions and weakening its basic responsibility for intellectual development? Don't pupils who are living in poverty and those who are potential dropouts need strong academic programs just as much as other pupils do? Wouldn't failure to provide disadvantaged pupils with equal opportunity for academic achievement be a form of discrimination?

SCHOOLMEN: Haven't the behavioral scientists found out that it is impossible to isolate intellectual growth from other phases of growth? Aren't today's programs to combat poverty and dropouts merely extensions of the former movements of applied economics and life adjustment? Isn't it obvious that school programs have to be designed to serve several purposes if they are to promote the public interest and meet the need of both the college bound pupils and the pupils not going to college?

3. *Teacher Education: Scholarship in the intellectual disciplines versus a dual preparation in subject areas and in adolescent growth and development.*

SCHOLARS: Don't we have to face up to the fact that the intellectual standards which prevail in pedagogy courses are notoriously weak as compared with liberal arts courses? Aren't most education courses tenuous proliferations of thin methodologies? Shouldn't teacher certification be a responsibility of the university rather than the State? Isn't it a mistake to assume that certification means competency?

SCHOOLMEN: Is there any evidence to show that anyone can teach any subject to any child at his level of maturity? Won't properly planned internship programs under the supervision of master teachers weed out the incompetent? Is the study of an intellectual discipline the same for a future teacher as it is for the future scholar? Are there as many weak courses taught in liberal arts programs as critics find in education?

4. *Curriculum Design: Intellectual disciplines versus common learnings and special needs and interests.*

SCHOLARS: Doesn't the accelerated growth of knowledge make it impossible to "cover" a subject and therefore necessary to teach the structure of the discipline? Isn't the structure of a discipline an intellectual organization which can be used to facilitate the intellectual development of the pupil? If the curriculum emphasizes the personal and social problems of adolescence, how will pupils develop the concepts, abstractions, generalizations, and principles necessary for in-

tellectual growth? Aren't scholars on the research frontier in the best position to project downward the concepts needed if intellectual development is to have proper continuity?

SCHOOLMEN: Can a curriculum be coordinated and unified if it is built on an additive basis with new math, new science, new English, etc.? Can a curriculum be planned without reference to the nature and needs of the pupils to be served? Aren't the principal and his staff the natural unit to design the curriculum, using a variety of resources, including the intellectual disciplines? Isn't a wholesome childhood and youth the best preparation for a fully functioning adult? Don't we short-circuit the growth processes when we rush pupils into the adult domain of the scholar, with his developmental tasks unfinished?

5. *The Learning Process: Processes of inquiry versus the general method of intelligence.*

SCHOLARS: Isn't it the processes of inquiry which create the substance of a discipline? And therefore isn't it necessary to teach pupils to think as mathematicians, biologists, economists, etc.? Doesn't the pupil have to stay within the domain of the discipline if he is to fully understand its uniqueness and observe its ground rules? If the teacher departs from this central task of intellectual development to deal with the "needs" of the pupil, isn't he in danger of becoming a meddling, amateur psychotherapist?

SCHOOLMEN: Aren't the special processes of inquiry in the various disciplines merely refinements of the general method of intelligence? If the general method of intelligence was used successfully in the past, as in the 8-year study, for example, why abandon it? If we concentrate on the intellectual development of pupils, will we neglect other significant developmental needs which influence learning?

6. *Individualization: Through rate of learning versus through rate and kind of learning.*

SCHOLAR: Hasn't academic learning become a prerequisite for employment in our society and hasn't the development of masses of intellectuals become an educational imperative? Isn't it now possible through modern techniques of programing and pacing to almost guarantee that any pupil will successfully learn any subject? Shouldn't pupils from the lower socioeconomic levels be permitted to discover their academic potentials and interests? Haven't most educators failed to grasp the true potential for using automation and new organization designs to free teachers for creative activity and to release the learning potential of pupils? Haven't pedagogical theories tended to play down the ability of pupils to deal with difficult intellectual content?

SCHOOLMEN: Wouldn't increased emphasis on academic learning force many more pupils to drop out of school? Doesn't the study of cognitive development suggest that differentiation is needed in both styles and rates of learning? Can a motoric type pupil learn from academic teaching? Doesn't the normal curve of distribution apply to human abilities and suggest that academic potential is a restricted rather than a general characteristic? Is the emphasis on the academic curriculum for all a retreat to the selective academic high school of the past (see the pronouncements of the Committee of Ten in 1894) rather than an advance into the Space Age? Doesn't it suggest a return to 19th century faculty psychology and its doctrines of mental discipline and the transfer of training?

7. *Theory: Realism, positivism and meritocracy versus experimentalism and democracy.*

SCHOLARS: Doesn't the knowledge of the structure of a discipline give insight into the nature of reality by helping us understand the structure of the physical universe? Isn't the understanding and management of these natural laws basic to man's survival and cultural growth? Isn't man frustrated by his language habits which are shaped by custom, subjectivity, and prejudice? Don't we need to use linguistic analysis in the building of a system of symbolic logic based on mathematical models? Shouldn't our educational system be designed to discover and develop intelligence as a natural resource? Shouldn't we strive for a leadership of brains in the Space Age rather than an artistocracy based on family, wealth, or social status?

SCHOOLMEN: Does the structure of a discipline actually exist or does it exist only in the mind of the scholar? What can man do about a reality which exists outside of his experience? Doesn't man learn to manage reality through the direction of his experience by means of the method of intelligence? Doesn't man's experience grow out of the interaction between his needs and his environment? Isn't it during this interaction that man builds his meanings and values into an organization which becomes more and more systematic and logical to the degree that his experience becomes specialized? Don't all men have stocks of both generalized and specialized knowledge? Doesn't a social democracy respect all persons as individuals and seek to develop each to his fullest potential whether he stands at the top, bottom, or middle of the curve of normal distribution?

THE FUNDAMENTAL QUESTIONS raised by this confrontation will have to be resolved if professional progress is to be made. If they are to be successfully resolved they will have to be clarified by discussion and subjected to study, research, and experimentation. This professional development is a continuing process as one set of problems phases into new problems.

What does all of this mean to the educational practitioner and the principal and his staff who must go on working on specific problems before the questions are resolved? He needs to understand and participate in the dialog, but he must also act on an "as if" basis. Thinking as a mathematician or a physicist does will not help him. He must learn to think as an educator. His problems cannot be solved for him by university scholars in mathematics, physics, economics, or the other intellectual disciplines. He has to make the decisions, and he has to assume the responsibilities.

The educator must act in areas where there is no consensus. He must make assumptions and formulate hypotheses. Too often he does not examine these basic assumptions con-

sciously and deliberately before he acts on them; too often his action is based on opportunism, expediency, and hunch.

What are some reasonable assumptions upon which an educator can act in the light of the preceding analysis of trends and issues? Let me suggest a few.

♦ It seems reasonable to assume that the dialog will continue. Historically our school system has evolved within a polarization of thought between those who would restrict the role of the school and those who would expand it. Intellectual development vs. personal and social development has been the pivotal issue in numerous controversies: The Latin grammar school vs. academy, the academy vs. the high school, and the academic high school vs. the comprehensive high school. Current controversies obviously grow out of deep-seated preferences which will doubtless continue to influence school decisions. But the debate will be useful if it focuses attention on the basic issues and prevents the educational pendulum from swinging to either extreme and if it eventually creates a more nearly inclusive conception of education which does justice to both points of view.

♦ It seems reasonable to assume that education will be used more deliberately as an instrument for serving the public interest at local, State, and national levels. This assumption is based on sound evidence: economists now generally recognize that education is a good capital investment rather than an unproductive service, and that education must become an integral part of social and economic planning if our efforts to improve conditions in this country through solving such problems as poverty, delinquency, or automation are to be successful. In a world in which war is unthinkable, leadership will shift from the nations with the greatest military might to the nations with the finest educational systems.

♦ It seems reasonable to assume that research in education will not only continue but expand. Rapid social change, new educational demands, the sharpening of issues, the search for better ways of doing things—all of these s t i m u l a t e research effort. Moreover research itself is self-perpetuating because as it is carried on it opens up new needs for additional research. Educators will have to become more effective consumers of research through analysis, selection, application, and evaluation. At the same time they will very likely help determine the direction of research by their constructive criticism of its findings. The implementation of research findings will facilitate more experimentation with new organizational patterns and new teaching and learning techniques.

♦ It seems reasonable to assume that old educational roles will have to be remade and new roles developed. To keep abreast of new knowledge and techniques in their fields, teachers and principals will have to be educated and then periodically reeducated, formally and in inservice programs—as individuals and as team members. Teaching will become differentiated as the curriculum is broadened and made more precise to provide for the bright, the handicapped, the deprived, and others. As the basic teaching role changes, other roles will be extended and new ones created. The noninstructional services of counselors, psychologists, visiting teachers, and health specialists will be expanded. The electronics revolution will create the need for programers, artists, designers, and technicians. This shifting of roles will call for planning and replanning.

♦ It seems reasonable to assume that there will be a realinement in education as the pressures of problems at State and local levels force officials to reach out for additional resources. They will need to call for a nationwide effort to meet the expanding demand for new ideas, new materials, and new t e c h n i q u e s. Doubtless the realinement will be voluntary and cooperative and will emphasize a maximum of local initiative and responsibility. But education will no longer be thought of as the responsibility of only State and local levels. It will be thought of as a broad social movement mobilized to expand individual opportunity, as a continuing process aimed at overcoming handicaps and utilizing all sources of strength in developing the social welfare. This will call for nationwide planning. Conant calls for such planning through a process of "Cooperative Federalism" which would seek to strengthen State departments of education.

THE educational administrator needs to examine these basic assumptions and develop and use them tentatively to improve education. I emphasize the word "tenatively," for the real test of his professional artistry comes when on the basis of these assumptions he acts to improve education in complex and diverse situations.

Having examined the ground on which they stand, the principal and his staff need to study the dynamics of the field in which they work. What guidelines to action are implied in the assumptions? How can we help them develop a sense of direction and guiding principles? Let us look at some of the possibilities which they might consider helpful.

If we are to develop a sense of direction, we need to clarify the meaning of quality in secondary education. Our educational values as expressed in our conception of quality are what give direction and drive to our efforts.

The word "quality" is sometimes used to mean high standards achieved through a process of selection. For example, quality control in industry means the selection of items which measure up to a high standard and the rejection of those which do not. This meaning of quality was characteristic of the period during which the selective academies and high schools dominated the whole field of secondary education.

Now that our secondary schools are no longer limited to the selective type of institutions this meaning can no

longer be used across the board. Secondary education today serves a diversity of purposes at different levels; for example:

—public, private, and parochial schools
—middle schools, junior high schools, and senior high schools
—comprehensive suburban schools serving all young people in the community
—isolated small rural schools
—large city comprehensive and specialized schools
—schools in city slums and rural areas of poverty
—special schools for the gifted and talented
—special schools for the physically handicapped, the emotionally disturbed, and mentally retarded
—specialized vocational high schools, comprehensive vocational schools, area vocational schools
—and other types.

We now need to develop a functional conception of quality in secondary education, based on the answers to such questions as these: What is the purpose of the school? Is it achieving its purpose? An automobile manufacturer designs his products to serve a variety of purposes—sedans, sportscars, stationwagons, trucks, and the like. All may be quality products, but they are judged by the way in which they serve their different purposes.

What purpose or purposes should our secondary schools serve? The answer was easy when they were selective and primarily college preparatory institutions. Then we could concentrate on the intellectual development of small groups of academically ambitious and able pupils. Now a secondary school contains a cross section of all types of boys and girls.

The all-inclusive task of the public school from this viewpoint is the guiding of a pupil, through programing handpicked for him, toward the educational goals of the school. The expanding role of the public secondary school makes it necessary for the principal and his staff to deal with behavior in a variety of types for these purposes:

- Promoting the growth of academic pupils through the effective use of methods of inquiry in discovering the structure of the intellectual disciplines
- Facilitating the motoric learning of the nonacademic pupils through experiences which are significant to them and which will lead to educational goals
- Identifying pupils with special talents (music, arts, crafts, leadership, etc.) and planning programs to stimulate their development
- Assisting pupils who are experiencing difficulty in "just growing up" to deal more effectively with their developmental tasks
- Developing compensatory programs for pupils who are disadvantaged because of physical, mental, or social handicaps
- Making early identification of the delinquency prone and planning preventive programs
- Initiating referrals to other agencies of pupils whose disturbances are so deep that the school cannot deal with them
- Diagnosing the needs of the troubled pupils who do not fit neatly into any one of these categories because they have several problems growing out of more than one cause.

If we agree on these points, we can, I believe, conclude that the first step toward developing a secondary school of high quality is for the principal and his staff to make a professional diagnosis of the situation in his school. In doing so, he would answer such questions as these: Who are the pupils? What are their educational needs? What type of community is this? What are the social trends, problems, and issues at local, State, and national levels? What are the most influential factors in learning? How shall we define our schoolwide goals? How can we design a school program to achieve these goals? How can we individualize this program to promote the maximum growth of each pupil according to his potential?

EDUCATIONAL PLANNING has moved from a mass approach to provisions for the gifted, the average, the slow, and the handicapped. This is a movement toward quality, but in a school of high quality the basic unit of planning will be the individual pupil. This pupil is unique; he may not fit into any conventional categories; he may be gifted in some respects, average in others, slow in still others, and suffering from a handicap. An educational program specifically designed to fit an individual is a hallmark of quality; but we achieve this quality at the expense of uniformity and standardization.

THE PRINCIPAL of a school needs to be a competent professional leader. He has to work with his staff in setting up goals for the whole school and for each department. Moreover, his way of working with his staff will generally determine the social climate of his school, the amount of initiative and responsibility teachers may assume, and the extent of participation by teachers, pupils, and parents in planning.

As instructional leader of his school, the principal has three major responsibilities:

1. To provide for the organization, administration, and supervision at the building level.

2. To plan opportunities for pupils to have educational experiences through subjects and activities which will facilitate their growth toward established educational objectives.

3. To develop an effective counseling system (personal-educational-vocational) with all students to insure that each is achieving in the program best suited to him.

The emphasis on the responsibilities of the building principal and his staff is not to suggest that they work in isolation. Just the opposite is true: the more intensively a building faculty works on its problems, the greater will be its need to reach out and establish communication and working relationships with faculties at other levels. This outreach will

gradually develop a new network of voluntary cooperative relationships. In this way nationwide resources can be mobilized to achieve quality at the grassroots level. And the principal will perform a key role in this process as he and his staff diagnose local conditions and then review, evaluate, select, and remake the resources available at the State and national levels.

The proliferation of problems and the continued expansion of educational research will stimulate the search for quality through innovation.

Innovations at the building level require considerable skill in educational engineering if they are to rise above patchwork imitation. Innovation may lower rather than raise the quality of education, it must be carefully planned and evaluated. For example, sporadic, isolated, uncoordinated effort generally creates confusion, conflict, and personal tensions that inevitably lower the quality of education. But a well-planned process of education would provide for—

—the building of a favorable climate for experimentation within the community among board members, administrators, and teachers

—funds within the budget to defray the costs of innovation, including funds for inservice education, materials and equipment, released time for teachers to plan consultive services, and the like

—coordinating machinery which will enable a principal and his staff to approve of innovations (particularly those to become integral parts of the local plan) after they have diagnosed needs

—teachers who are to use the innovation to share in the planning of a specific project

—opportunities for participating teachers to develop the required competencies

—professional evaluation of the project which would include the accumulation of evidence of its effect as the project develops

—board members, parents, pupils, and nonparticipating teachers to be kept informed about the project, including need, purpose, design, and evaluations

—a period of testing and evaluating the project in restricted area before it is accepted for general use.

Innovation in and of itself is not necessarily an earmark of quality, but it can be a guide to quality when it is carefully designed.

TODAY'S teachers will need new competencies to meet tomorrow's problems. What are the competencies required by today's frontier problems? These include the ability—

To teach the structure of a discipline through the process of inquiry and discovery.

To individualize instruction through the use of programed materials.

To teach, as a member of a team, a large group, a small group, and an individual.

To teach effectively, using a variety of materials in a systems approach.

To teach so that pupils may develop proper concepts of self and sound mental and physical health in a good social climate.

To use the findings of research.

To provide for different cognitive levels and styles.

To effectively teach the physically handicapped, the mentally retarded, and the culturally different.

To teach the principles of community improvement through overcoming poverty, delinquency, and unemployment, or basic economic conditions of food, clothing, and shelter.

To work for the improvement of international understanding and relationships.

To teach subjects so as to close the gap between what is known and what is taught.

These points merely suggest some of the new problems which will phase into tomorrow's problems. They suggest that teachers and principals will have to be educated and continuously reeducated through preservice and inservice programs and regular periods of sabbatical leave. The quality of the school can never rise above the competencies of its staff; their roles will be changing internally and adjusting externally to new professional roles of programers, technicians, and others.

These guidelines to developing schools of high quality are intended to be suggestive rather than a complete and detailed description. I have made no attempt to list them in any order of priority because they are all interactive elements which function together. In the two articles I have tried only to indicate a general direction which the search for quality in secondary schools might take.

NAS sponsors post-doctoral program at Smithsonian

The National Academy of Sciences has established a program at the Smithsonian Institution for post-doctoral research by investigators from other institutions in the United States and abroad. The Smithsonian has made 12 visiting research appointments available for 1965. These appointments will be for research in science and engineering history, biological sciences, and physical sciences. Investigators will work in the Museum of History and Technology, the Division of Radiation and Organisms, Museum of Natural History, National Zoological Park, Canal Zone Biological Area, and the Smithsonian Astrophysical Observatory.

The National Academy of Sciences has sponsored visiting research appointments within the Federal Government since 1952 to provide opportunities to scientific investigators to work with the many outstanding facilities of the Federal Government and to give Federal agencies an additional source of creative researchers. Programs have been conducted in defense laboratories, the National Bureau of Standards, the Weather Bureau, the Bureau of Mines, and installations of the Space Administration.

Let's Make the Most of Our School Custodians

R. N. FINCHUM

THE CUSTODIAN of a modern school plant must be a man of many skills, for school facilities are complex. He must have at least a working knowledge of the fundamental requirements of every aspect of the job, though he need not be an expert in every craft involved. His job requires working knowledge of housekeeping, engineering, horticulture, and economics. As a housekeeper he maintains a sanitary school through his practical knowledge of the chemistry of sanitary supplies. As an engineer he operates the building's mechanical equipment in line with the basic principles of combustion, illumination, and ventilation. As a horticulturist he maintains lawns and manages plant life according to the best rules of gardening. And as an economist he exercises judgment based on practical knowledge in selecting the kinds and amount of supplies for each job to produce maximum results at minimum cost.

Whether job descriptions mention it, custodial services include many very important duties and obligations related to *management, planning, public relations, safety,* and *maintenance.*

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Management

Custodians not only execute work directives and assignments from their superiors but also exercise initiative in developing their *work schedules, testing supplies and equipment, keeping records, and preserving property.*

Work schedules properly planned and carefully followed permit custodians to utilize their time and skills to best advantage and to accomplish more in less time than they would otherwise.

According to Office of Education data on public school costs in the United States for the past several years, school systems spent about 7 percent of their annual current expenditure for plant operation. About 60 percent of plant operating costs was for salaries and wages for custodians, maids, and other building service employees. In 1963–64 the Nation spent $17 billion on its schools. Plant operating costs, at 7 percent of this figure, amounted to $1.2 billion, of which $714 million (60 percent of the operating cost) was for salaries and wages of building service employees.

By conservative estimate, worker efficiency can be improved by not less than 10 percent if appropriate work schedules are developed and followed. Many schools do have good work schedules, but for illustration, let us assume that this practice is not nationwide. If all school custodians developed and followed work schedules, the $714 million now spent on their salaries would purchase $785 million in services.

The good custodian *tests custodial supplies and equipment* even when he has not received specific instructions from his superiors. He compares the effectiveness of one product with another and rates the performance of similar pieces of equipment. When given an opportunity, he shares his observations on quality and performance of products and equipment with school purchasing officers. The wise school official, realizing that it is imprudent to save on price and lose on cost, seeks the advice of his custodial staff so that he can purchase supplies and equipment on the basis of performance rather than price. Such advice can be of inestimable value to a school district. For example, the cost of washing the walls of the average classroom is about $35 for labor and 35 cents for material. Less expensive materials can be used, perhaps at a saving of 10 cents a room, but if walls must be rinsed after washing, the cost of only a few minutes of added labor for this purpose will wipe out the small savings on materials. The advice of an experienced custodian can save the school from making a false economy move.

Keeping records of costs, performance standards, employee productivity, and the like to provide building services with maximum efficiency can be extremely valuable to management in effecting economies in operation.

Property preservation and security is an increasingly important custodial function, particularly in sections of the country where vandalism at night, on weekends, and on holidays is acute. Some of the destructive acts against school property at these times undoubtedly are possible because the custodian fails to close and lock windows and doors against unauthorized entry. The nationwide loss from vandalism is high. In one State alone, rock throwing and other destructive acts against school property in 1961 cost the taxpayers about $222,000, or about 12 cents per pupil enrolled in the public schools. Yet such loss can be avoided if school systems instruct custodians to exercise

great care in providing building security. Schools with more than one custodian can stagger work schedules so that one is on duty late at night.

Planning

Although most custodians are not specialists in the field of school plant planning, the experienced custodian can and often does render valuable service to school officials in the matter of choosing materials for construction.

The *materials* used in building construction largely determine its operational efficiency. The trained, wide-awake custodian can identify quality, serviceability, durability, and other characteristics contributing to maintenance ease in many types of building materials. He can give valuable judgments on the quality and serviceability of various kinds of floor covering, hardware, doors, windows, plumbing, sanitary fixtures, light fixtures, heating equipment, and other facilities of the plant. He represents the consumer's viewpoint and his opinions are worthy of consideration when specifications for new buildings are being written.

The design features of a building that make custodian services difficult and time-consuming are readily discernible by those who perform these services. School officials and planners can profit by asking custodians to share with them their ideas about design features contributing to economical operation. These features include storage closets (size, location, racks, and shelving), water outlets (location and size of mop sinks and locations of hose bibs for both hot and cold water), electrical outlets for custodial equipment (location, voltage, and position), sanitary features (cleaning and maintenance), and light fixtures (for ease of cleaning).

Public relations

Few school employees have as many opportunities to cultivate community good will for their schools as custodians. The kind of care given a school plant indicates to the public the degree to which its investment in school property is protected. It also influences the willingness of the public to spend more money on the schools and of school trustees to budget or not to budget for plant operation and maintenance.

The thoughtful custodian does many things to improve the school's image in the public mind. Few services are more important than those rendered adults when they meet on the school premises: Reserving parking areas; roping off auditorium seats for program participants and officials; arranging chairs, tables, and other equipment on the auditorium stage; furnishing U.S. flags and flag holders; properly lighting entrances, corridors, and stairways for night use; unlocking exit doors for fire safety; and installing directional signs to meeting places, toilets, and other areas.

Some custodians gain the respect of the community when they make life in school more comfortable for small children by assisting them with wraps, raincoats, and overshoes, and adjusting and repairing zippers, buckles, and other items too complicated for small children to understand. Children rarely fail to tell their parents about a kind helper.

The custodian who maintains high standards of cleanliness around school premises generates community and pupil pride in—and respect for—school property. He improves pupil morale and contributes to the aesthetic development of the pupil. And he exerts a continuing good effect on public relations.

Safety

Under compulsory school attendance laws, public officials have an obligation to provide—and parents and children the right to expect—school facilities that are safe from fire and other hazards to life, limb, and health. The custodian, as an employee of the school board, contributes significantly to the safety of the school through *good housekeeping practices, inspections,* and the *removal of hazards* to life and health.

The custodian accomplishes *good housekeeping* by giving careful attention to all custodial activities that promote cleanliness, preventing the collection of burnable material no longer needed, and providing for the storage of flammable items only according to safety regulations prescribed by fire codes. Housekeeping activities also include reasonable efforts to rid school premises of pest infestation in accordance with methods recommended by the local unit of the Public Health Service.

The inspection of buildings for fire safety is, admittedly, an engineering job, but a trained custodian can and usually does perform many inspectoral services. His inspectoral duties include these:

- Inspection of all fire extinguishers and other fire protection equipment at regular intervals
- Checking valves, connections, nozzles, and hoses of all standpipe stations regularly
- Testing fire alarm and other warning devices at appropriate intervals
- Checking all exit devices (such as antipanic hardware) daily
- Replacing light bulbs in exit signs
- Inspecting all storage areas at least monthly
- Checking fuse boxes and replacing fuses rated above the designated load capacity of any circuits
- Examining all electric switches, outlets, appliances, motors, and service panels for faulty operation several times a year
- Inspecting unused or infrequently used building areas as often as practical and keeping them clean
- Testing all controls (valves, thermostats, and gauges) of water heaters and steam boilers at frequent intervals
- Testing hot-cold water mixing valves for shower installations three or four times a year
- Assisting teachers with exit drills
- Removing accumulation of grease

from kitchen exhaust ducts, fans, and filters

- Storing treated floor mops, brooms, dustcloths, and other custodial materials in a way that will prevent spontaneous combustion
- Replacing nonapproved electrical extension cords with UL-approved cords
- Keeping all corridors, stairs, and exit routes free of obstructions which would impede the flow of traffic.

The *removal or correction of hazards* to life, health, and safety which are discovered by inspection, or which may arise suddenly, should be done immediately after discovery. Often the custodian is the only person available to perform this duty. If he has been carefully trained in all aspects of building care, he can usually take corrective steps, without outside help, to avert a possible catastrophe. When dangerous conditions requiring technical help suddenly develop, he can take the correct preliminary steps to prevent injury or loss of life and property. These steps taken, he can then report to his superior so that technicians can be called in to correct the difficulty.

Minor maintenance

Minor maintenance, sometimes looked upon as "preventive maintenance," is another service custodians usually perform. Custodians are not expected to perform technical maintenance work, but there are many small jobs they can do to prevent further trouble and to keep the school plant operating at peak efficiency. Preventive maintenance helps the community to get a full return on its investment by controlling plant deterioration and preventing costly breakdowns that lead to premature replacement of parts and components.

Advisory services

Most school administrators strive to maintain a close liaison with their communities through boards of education and lay advisory committees. A citizens' advisory group is particularly important when a district needs a new school. Such a group is often made up of several subcommittees each commissioned to study and advise on specific elements of the building program. A subcommittee whose function is to work with the architect and responsible school officials on the details of design and construction can be exceedingly helpful in recommending kinds of construction materials, types of mechanical equipment, and other building elements that are both durable and easy to maintain. School custodians are often overlooked for membership on this type of subcommittee, yet their experience qualifies them to evaluate a variety of materials and equipment used in school facilities. On matters such as these, let's use our school custodians to the fullest!

Accounting for Every Pupil

JOHN F. PUTNAM

WHAT do the words "educational accounting" bring to mind? To many people these words primarily suggest accounting for school finances. Records about finances are needed by school administrators, but equally important for many of their purposes are records of their pupils, the staff members and property of their schools, and the curriculum and instruction provided. Each of these traditional areas of educational record keeping is essential to administrative planning and decision making, and all of these areas are interrelated and inseparable components of the total process of administration.

With the perspective gained from time and experience, many school administrators who are proficient in collecting and using significant information about the finances of their schools and school systems are equally diligent in collecting and using significant information about the pupils in their schools and school systems. These administrators have learned that such information is needed by all those who work with pupils, by those who administer educational programs, and by the public itself.

Two general types of information are collected about each pupil. The first type is commonly found in his cumulative record and includes information about the pupil's family, his health, school performance, and out-of-school activities. Such information is used primarily in counseling the pupil and in guiding him into an appropriate school program, college, or vocation. It accompanies him as he transfers from one school to another or from secondary school to college.

The second general type of information about pupils is used primarily for administrative purposes. Such information includes data about enrollment and residence which, in turn, are related to data on tuition, provision of transportation services, receipt of education funds from various levels of government, and other administrative matters. If a school administrator is to have sufficient data to determine the condition of the local community and schools—including the local status of nationwide problems such as cultural deprivation, poverty, equal opportunity, and the

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dropout problem—his staff must collect and maintain adequate information about each pupil. He must be able to identify the characteristics by which pupils are classified in the various groups, and he must have specific information about their residence and enrollment.

Significant items of information in both of these broad categories have been identified and defined by the Cooperative Project on Pupil Accounting for Local and State School Systems, a 5-year project involving over 250 representatives of 10 national educational organizations and the Office of Education. (See "Toward Improved Information About Pupils," *School Life*, January–February 1962, p. 23–25.) The product of their efforts is *Pupil Accounting for Local and State School Systems* (State Educational Records and Reports series: Handbook V, OE–23035, U.S. Government Printing Office, 1964, $0.60), a new handbook in the State Educational Records and Reports series.

With the completion of the new pupil accounting handbook a guide to the uniform collection of items of information about pupils becomes available for the first time.

MANY school systems already have taken steps to incorporate these items into their pupil information systems, others will follow. It is hoped that the items of this handbook will eventually be used in all or most of the local and State school systems of the Nation. Universal or at least wide use of these items, accurately recorded at their source, will result in these advantages:

- Greater comparability of information about pupils within the various communities and States.
- Greater consistency in the kinds of information accompanying pupils who transfer from one school or school system to another.
- A greater degree of accuracy in the summaries of information compiled by local, State, and national offices.
- A sounder basis for evaluating administrative, organizational, and teaching practices.
- A greater quantity of significant information to guide local and State authorities in determining policy.
- Easier and more reliable reporting to the public on the condition and progress of education.
- More favorable conditions for research and use of research data.

What is more, reports based on these items will not only merit the full confidence of their users but be more easily interpreted and more useful.

THE availability of significant information about pupils depends on the use of sound principles of accounting undergirding efficient procedures in collecting meaningful items and maintaining accurate records. One such principle is the following:

> *School administrators should account for the coming and going of every pupil. It is just as important to account for the coming and going of every pupil as it is to account for the coming and going of every dollar.*

To be put into practice, this principle requires the use of specific items of information on entrance, membership, and withdrawal. Such items, identified and defined by the Cooperative Project on Pupil Accounting, should be regularly available through *routine* pupil accounting procedures (see box).

Information about pupils' entry into school currently is available in most States in a form closely resembling the recommendations of the Project. The Project has, however, introduced a new item, "R7," to apply to the few situations in which a pupil enters a school in a given State directly from a school in another State after previously entering a school in the given State during the same regular school term.

Moreover the Project has identified items of information about withdrawing from school, items which frequently are not available at present. According to the recommendations of the Project, schools should consider pupils who leave as withdrawing by transferring, by completing their school work, by dropping out, and because of death.

To identify the precise withdrawal category of each pupil who leaves school requires the use of sound exit and followup procedures such as the following.

Record every pupil's entry and withdrawal.—School staff members should, as a routine matter, indicate the date and type of entry or re-entry for every pupil entering a school or school system. Similarly they should, again as a routine matter, indicate in his record the date and type of his withdrawal, whether he leaves during or between regular school terms.

Conduct an exit interview.—Each pupil should be advised when he first enters a school—and from time to time—to notify his homeroom teacher, counselor, principal, or other designated person if he should plan to leave school and have an exit interview scheduled. During this interview the official should determine the type and circumstances of the pupil's withdrawal and endeavor to provide the pupil with information which will be useful during his transition to another school or to community life.

Transfer records.—Each school should attempt to obtain the cumulative record of each new pupil as quickly as possible after he enters. Similarly, a school receiving a request for the record of a pupil who has transferred should send it as rapidly as possible. To expedite the transfer of records, States and local schools may devise an easy means of communication such as a postcard which can be carried by the pupil (or sent) to the new school. The card should indicate his grade and/or courses, the name and address of his former school, and other vital information. A return card may be used to notify the former school that the pupil has transferred, to provide the name and

address of his new school, and to request that records be forwarded. For migrant children in a given migrant stream it might be desirable for States along the migration route to maintain cumulative records at some central location and to forward copies to schools upon their request. The storage and transmission of information on such a basis are made feasible by recent developments in electronic data processing techniques and in the photocopying of records.

Followup on pupils who leave without notice.—In some instances pupils leave school without giving prior notice, and no subsequent request for records arrives from another school. If such a pupil is of secondary school age, the school should consider him temporarily to be a dropout, in a special category of "school status unknown," until followup procedures indicate the exact nature of his leaving. School staff members should endeavor to minimize the number of "dropouts" in this category by attempting to ascertain what has happened to these former pupils by all feasible means, including questioning the pupils' friends, neighbors, and relatives.

THE universal or widespread use of the new pupil accounting handbook, including the acceptance of the principle that schools should account routinely for the coming and going of every pupil, will make more significant information about pupils available. Such information can be used for guidance purposes and for making sound administrative decisions about education at all levels—local, State, and Federal. The end result should be a more appropriate and more effective education for *all* pupils throughout the Nation.

Terms and Definitions

These terms have been defined in a nationwide project that recently completed the work of selecting, organizing, and defining the items of information basic to a system of collecting and analyzing data about pupils. The items here are only a few of these agreed on. The definitions have been published in full as part of a handbook of items of information for use in pupil accounting; here they are slightly abridged.

ENTRY

Original Entry

An original entry is a pupil who enters an elementary or secondary school for the first time during a given regular school term in a given State or outlying area of the United States. There are two kinds of original entry:

E1. Original entry for the United States. A pupil who for the first time in the United States or its outlying areas enters either a public or nonpublic elementary or secondary school for the regular school term for which the report is made.

E2. Original entry transferred from another State. An entering pupil who, during the regular school term for which the report is made, has previously entered either a public or nonpublic elementary or secondary school in another State but has not previously during the term entered a school in this State.

Reentry

R1. A pupil received from another room within the same elementary or secondary school.

R2. A pupil received from a public school in the same local administrative unit which he entered earlier in the current regular school term.

R3. A pupil received from a nonpublic school located in the same local administrative unit which he entered earlier in the current regular school term.

R4. A pupil received from a public school in the State but outside the local administrative unit, which he entered earlier in the current regular school term.

R5. A pupil received from a nonpublic school in the State, but located outside the local administrative unit, which he entered earlier in the current regular school term.

R6. A pupil returning to the same room in the same school after withdrawal or discharge from this room earlier in the current school term, who has not entered any other school during the intervening period.

R7. A pupil received directly from a school in another State or country who previously entered a school in this State during the current regular school term.

WITHDRAWAL

Transfer

T1. Transfer within the same school.

T2. Transfer to a public school or other instruction under public school supervision in the same local administrative unit.

T3. Transfer to a nonpublic school located within the same administrative unit.

T4. Transfer to a school outside the local administrative unit.

Completion of schoolwork

C1. Graduation from high school (grade 12) or community college.

C2. Completion of schoolwork in an approved manner other than C1.

Dropout

A pupil drops out when he leaves school, for any reason except death, before he graduates or completes a program and does not transfer to another school.

Death

BONDS

for educational purposes

. . . sales, interest rates, et cetera . . .

FOR THE PUBLIC SCHOOLS

By ELMER C. DEERING, *specialist on the financing of school facilities, Division of Educational Organization and Administration, Office of Education.*

THE OFFICE OF EDUCATION has issued five annual reports on bond sales for public school purposes. During this period, sales have totaled about $12 billion, 90 percent of which were general obligation bonds and 10 percent, revenue bonds. With few exceptions, the revenue bonds were issued by school building authorities or holding companies under lease-rental arrangements.

As a rule, revenue bonds are not eligible for rating by Moody. The *School Life* reports on net interest costs of school bonds have carried a footnote saying that rated bonds include from 75 to 80 percent of all bond sales for public school purposes. In 1959–60, rated bonds averaged only 67 percent of all sales; in 1960–61, 75 percent, and in 1963–64, 82 percent. If ineligible revenue bonds had been eliminated from the totals, rated bonds would have averaged 72 percent of all bond sales for schools in 1959–60, 82 percent in 1960–61, and 91 percent in 1963–64.

Future reports on bond sales will show the percentage of rated bonds based only on general obligation bonds. This month's table (see footnote) shows that 90 percent of the general obligation bonds were rated, 18 percentage points over the 1959–60 figure. The increase can be attributed both to an expanded number of school systems with an outstanding bonded indebtedness of at least $600,000, the minimum necessary for rating purposes, and to school officials' greater awareness of the importance of a credit rating.

Average net interest cost of bonds sold on primary market for public schools: Annual, 1959–60 to 1963–64; monthly, October 1963 and October 1964

Period	General obligation bonds							Revenue bonds
	By Moody ratings						Non-rated bonds	
	Aaa	Aa	A	Baa	Ba	All		
1959–60	3.26	3.63	3.77	4.21	4.55	3.84	4.03	4.21
1960–61	2.82	3.34	3.43	3.75	3.97	3.48	3.58	3.87
1961–62	2.84	3.23	3.19	3.51	3.93	3.27	3.43	3.55
1962–63	2.64	2.86	2.99	3.29	3.72	3.03	3.25	3.42
1963–64	2.88	3.07	3.17	3.43	3.80	3.21	3.40	3.50
1963								
October	2.76	3.05	3.18	3.38	3.69	3.18	3.36	3.51
November	2.89	3.14	3.25	3.46	.....	3.25	3.62	3.48
December	2.86	3.04	3.18	3.50	3.80	3.23	3.37	3.74
1964								
January	.....	3.05	3.21	3.46	3.81	3.25	3.41	3.57
February	2.85	2.87	3.13	3.39	3.83	3.16	3.42	3.43
March	3.00	3.08	3.29	3.47	3.88	3.32	3.41	3.37
April	.....	3.09	3.20	3.49	3.81	3.24	3.43	3.50
May	2.83	3.16	3.13	3.47	3.73	3.22	3.42	3.47
June	2.94	3.14	3.19	3.50	3.86	3.24	3.41	3.58
July	2.77	3.20	3.18	3.49	.....	3.24	3.38	3.39
August	2.70	2.95	3.16	3.49	3.84	3.22	3.28	3.24
September	.....	2.98	3.19	3.63	3.67	3.31	3.40	3.59
October	2.96	3.15	3.26	3.42	3.75	3.31	3.38	3.38

Source: Sales reported by *The Daily Bond Buyer;* ratings reported by Moody's Investors Service (rated bonds include about 90 percent of general obligation school bonds).

Average net interest cost of Moody-rated bonds sold on primary market for public schools, by rating and by term of bond, for the latest quarter and month available

Term of bond	Aaa	Aa	A	Baa	Ba	All rated bonds
	Latest quarter (July–September 1964)					
Under 15 years	2.73	2.75	3.02	3.25	3.67	2.94
15–24 years	.....	3.03	3.16	3.59	.....	3.28
25 years and over	.....	3.22	3.22	3.49	3.84	3.28
All terms	2.73	3.13	3.17	3.54	3.79	3.25
	Latest month (October 1964)					
Under 15 years	.....	2.73	2.94	2.92	.....	2.91
15–24 years	2.96	3.10	3.19	3.37	3.75	3.28
25 years and over	.....	3.24	3.30	3.47	.....	3.35
All terms	2.96	3.15	3.26	3.42	3.75	3.31

Source: Sales reported by *The Daily Bond Buyer;* ratings reported by Moody's Investors Service (rated bonds include about 90 percent of general obligation school bonds).

Future reports on bond sales will show the percentage of rated bonds based only on general obligation bonds. This month's table (see footnote) shows that 90 percent of the general obligation bonds were rated, 18 percentage points over the 1959–60 figure. The increase can be attributed both to an expanded number of school systems with an outstanding bonded indebtedness of at least $600,000, the minimum necessary for rating purposes, and to school officials' greater awareness of the importance of a credit rating.

FOR COLLEGES AND UNIVERSITIES

By PAUL K. NANCE, *acting chief, Higher Education Business Administration Section, Office of Education, and Elmer C. Deering.*

BOND SALES for higher education totaled $81,133,000 during September: 51 sales by publicly controlled institutions totaled $69,345,000, and 12 sales by privately controlled institutions totaled $11,788,000. The average net interest rate was 3.40; on sales by public institutions, 3.38 percent; and on sales by private institutions, 3.52 percent.

All bonds sold by private institutions were purchased

by the Community Facilities Administration (HHFA), as were 16 of the sales by public institutions. Only eight sales were in the form of general obligation bonds, all by public institutions. More than 69 percent of the amount sold by public institutions and 86 percent of the amount sold by private institutions were for residential facilities or a combination of residential and other auxiliary facilities.

In addition to the sales for new facilities, two institutions made sales totaling $7,064,000 to refund existing obligations.

Bond sales for publicly controlled and privately controlled institutions of higher education in the United States, by institution, September 1964

Institution	Amount sold (000)	Term	Average net interest (percent)	Use of funds [1]
PUBLIC				
Henderson State Teachers Coll. (Ark.)	$283	3–30	[2] 3.01	Res.
	215	3–30	[2] 2.75	Res.
	1,049	3–35	[2] 3.13	Res.
	98	3–14	4.50	Res.
	400	15–40	[2] 3.63	Res.
Central Connecticut State Coll.	1,006	1–20	3.04	Ctr.
	1,206	1–20	3.04	Res.
Danbury State College (Conn.).	1,236	1–20	3.04	Res.
Southern Connecticut State Coll.	1,446	1–20	3.04	Res.
Univ. of Connecticut	3,000	1–20	3.04	Res.
Willimantic State Coll. (Conn.).	106	1–20	3.04	Res.
Iowa State Univ.	9,000	1–40	3.54	Res.
Kentucky State Coll.	1,325	1–25	3.84	Instr.
Univ. of Kentucky	1,000	1–25	3.74	Instr.
Delta College (Mich.)	3,460	1–4	2.61	Instr.
Montana State Coll.	695	1–14	3.38	Ctr.-res.
	2,605	15–39	[2] 3.50	Ctr.-res.
Northern Montana Coll.	150	1–39	[2] 3.50	Ctr.
Peru State Coll. (Nebr.).	666	1–30	3.67	Res.
Univ. of New Mexico	2,500	1–21	3.39	Instr.
State Univ. of New York [3]	11,950	1–31	3.66	Res.
Central State College (Okla.).	475	1–30	3.70	Res.
Eastern Oklahoma A. & M. Coll.	110	1–15	3.56	Res.
	392	16–40	[2] 3.63	Res.
Univ. of Oklahoma	3,000	1–39	3.73	Res.
Univ. of Rhode Island	1,500	1–20	3.10	Instr.
General Beadle State Coll. (S. Dak.).	450	1–50	[2] 3.63	Res.
	240	1–50	[2] 3.63	Ctr.
Northern State Coll. (S. Dak.).	150	1–38	[2] 3.63	Ctr.
South Dakota State Univ.	50	1–11	3.36	Res-din.
	340	12–15	3.59	Res-din.
	1,535	16–39	[2] 3.63	Res-din.
Washington State Univ.	3,453	10–39	[2] 3.38	Res-din.
	470	2–9	3.30	Res-din.
Bluefield State Coll. (W. Va.).	1,248	1–11	3.25	Instr.
Concord Coll. (W. Va.).	1,532	1–11	3.25	Instr.
	149	1–11	3.25	Impr.

Bond sales for publicity controlled and privately controlled institutions of higher education in the United States, by institution, September 1964—Continued

Institution	Amount sold (000)	Term	Average net interest (percent)	Use of funds [1]
PUBLIC—Con.				
Fairmont State Coll. (W. Va.).	1,486	1–11	3.25	Instr.
	47	1–9	3.63	Res.
	443	10–29	[2] 3.63	Res.
	610	1–23	[2] 2.88	Res.
Glenville State Coll. (W. Va.).	464	1–11	3.25	Instr.
	130	1–11	3.25	Impr.
Marshall Univ. (W. Va.).	232	1–11	3.25	Impr.
Shepherd Coll. (W. Va.).	46	1–11	3.25	Impr.
West Liberty State Coll.	1,114	1–11	3.25	Instr.
	684	1–22	[2] 2.88	Res.
	2,000	1–29	[2] 3.38	Res.
W. Va. Inst. of Technology.	2,322	1–11	3.25	Instr.
W. Va. State Coll.	1,114	1–11	3.25	Instr.
	163	1–11	3.25	Impr.
PRIVATE				
Spring Hill Coll. (Ala.)	752	1–39	[2] 3.63	Ctr.
Claremont Graduate Sch. & Univ. Ctr. (Calif.).	1,081	1–39	[2] 3.50	Res.
Biscayne Coll. (Fla.)	465	1–40	[2] 3.63	Res.-din.
Westbrook Junior Coll. (Me.).	560	1–39	[2] 3.63	Res.
Washington Coll. (Md.).	1,300	1–49	[2] 3.38	Res.-din.
Wheaton Coll. (Mass.).	1,750	1–39	[2] 3.50	Res.-din.
Rocky Mountain Coll.	520	1–39	[2] 3.50	Res.
D'Youville Coll.	1,762	1–49	[2] 3.50	Res.
St. Lawrence Univ. (N.Y.).	1,000	1–39	[2] 3.50	Res.
Delaware Valley Coll. of Science & Eng.	582	1–38	[2] 3.50	Res.
Carthage Coll. (Wis.)	1,120	1–40	[2] 3.63	Res.
Mount Mary Coll.	896	1–39	[2] 3.50	Ctr.-din.

[1] Abbreviations in this table indicate the following uses: Ctr., student center; Impr., campus improvement; Instr., instructional; Res., residential; Res.-din., residential-dining; and Ctr.-din., student center-dining.

[2] Purchased by HHFA, Community Facilities Administration.

[3] Financed by the Dormitory Authority of the State of New York.

American Education, the Office magazine which will replace *School Life* and *Higher Education* in January, will continue to carry the monthly report, Bonds for Educational Purposes, prepared by Mr. Deering and Mr. Nance.

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Comprehensive Report on Enrollment in Higher Education: First Term 1961–62 and Summer Sessions 1961, by Edith M. Huddleston and Naomi A. Sulkin, 1964, 85 pp., 60 cents (OE–54032).

Electronic Business Data Processing Peripheral Equipment Occupations: Suggested Curricula, 1964, 113 pp., 70 cents (OE–86010).

Farm Business Analysis: Guidelines for a Suggested Program in Farm Management, 1964, 19 pp., 20 cents (OE–81010).

Music Curriculum Guides, by Harold W. Arberg and Sarah P. Wood, 1964, 48 pp., 25 cents (OE–33032).

NDEA Language and Area Centers: A Report on the First 5 Years, by Donald N. Bigelow and Lyman H. Legters, 1964, 131 pp., 55 cents (OE–56018).

NDEA Language and Area Centers Program, 1964, 17 pp., 20 cents (OE–56017).

Space-Oriented Mathematics for Early Elementary Grades, by Edwina Deans, 1964, 47 pp., 30 cents (OE–29058).

Statistics of Land-Grant Colleges and Universities: Year Ended June 30, 1962, 1962 (Final Report), by George Lind, 1964, 128 pp., $1 (OE–50002–62).

Personnel and Activities for Talent Development in Departments of Education in States and in Outlying Areas, 1964, 1964, 40 pp., 20 cents (OE–35054).

Statistics of State School Systems, 1961–62: Final Report, by Carol Joy Hobson and Samuel Schloss, 1964, 102 pp., 65 cents (OE–20020–62).

Teachers Negotiate with Their School Boards, by James P. Steffensen, 1964, 84 pp., 40 cents (OE–28036).

The Number and Kinds of Earned Doctor's Degrees Awarded by United States Institutions in 1961–62, by John L. Chase, assisted by Helen O'Leary, undated, 10 pp. (OE–54030).

Free

Obtain single copies from the Publications Distribution Unit, U.S. Office of Education, Washington, D.C., 20202.

Public School Library Statistics, 1962–63, by Richard L. Darling, September 1964, 21 pp. (OE–15020–63).

In a New Key: Library Research in Progress, Number 13, by Alvin J. Goldwyn, September 1964, 19 pp. (OE–15005–13).

School Health the World Over, by Elsa Schneider, reprint from *School Life,* December 1960, 6 pp. (OE–28003).

Other Agencies

Publications listed with a price can be purchased from the Superintendent of Documents at the address given above. Publications without a price may be obtained without charge from the issuing agency.

Foreign language guides

Hungarian Basic Course, Units 1–12, 1963, 266 pp., $1.25 (S 1.114/2: H 89/units 1–12).

Hungarian Basic Course, Units 13–24, 1964, 267–606 pp., $1.75 (S 1.114/2: H 89/units 13–24).

Phrase Books:

Greek, 1963, 116 pp., 35 cents (D 101.11: 30–650).

Malay, 1963, 127 pp., 40 cents (D 101.11: 30–639).

Norwegian, 1963, 128 pp., 40 cents (D 101.11:30–610).

Swedish, 1963, 116 pp., 35 cents (D 101.11:30–612).

Thai (Siamese), 1963, 136 pp., 40 cents (D 101.11:30–631).

Thai Reference Grammar, 1964, 254 pp., $1.25 (S 1.114/3:T32.

Guidance

Job Horizons for College Women in the 1960's, Department of Labor, Bulletin 288, 1964, 78 pp., 30 cents.

Employment in the Atomic Energy Field: 1962 Occupational Survey, Atomic Energy Commission, 1964, 43 pp., 35 cents (Y 3.At 7:2 Em 7).

Scientific Careers in the Agricultural Research Service, rev. 1964, Department of Agriculture, 36 pp., 35 cents (A 1.38: 798/3).

Working for the U.S.A., Civil Service Commission, 1964, 24 pp., 15 cents (CS 1.48: 4/13).

Health

Diabetes, Department of Health, Education, and Welfare, rev. 1964, 6 pp., 5 cents (FS 2.50: 70/2).

Food Buying Guide for Type A School Lunches, Department of Agriculture, 1964, 75 pp., $1.25 (A 1.68:270/2).

Vaccination-Smallpox Poster, Department of Health, Education, and Welfare, 1964, 25 cents ($18.75 per hundred) (FS 2.26:V 13).

Vigor: Physical Fitness Plan for Boys, President's Council on Physical Fitness, 1964, 24 pp., 25 cents (PR 35.8: P56/V68).

Vim: Fitness Plan for Girls, President's Council on Physical Fitness, 1964, 24 pp., 25 cents (PR 35.8:P 56/V 72).

International

The Economic and Social Consequences of Disarmament: U.S. Reply to the Secretary-General of the United Nations, Arms Control and Disarmament Agency, rev. 1964, 47 pp., 35 cents (AC 1.2: Ec–7).

Foreign Visitor Programs, 1964, Department of State, 11 pp., 15 cents (S 1.67:86).

U.S. History

Answers to Questions About the American Indian, reprinted 1964, 38 pp., 20 cents (I 20.2:In 2/21/964).

The Civil War, 1964, 63 pp., 25 cents (Y 3C49/2:2 C 49/2).

Restoration of Ford's Theatre, 1964, 138 pp., $1 (I 29.21:F 75).

Rum War at Sea, 1964, 183 pp., $2 (T 47.2:R 86).

The United States on the Eve of the Civil War as Described in the 1860 Census, 1964, 73 pp., 35 cents (Y 3.C 49/2:2 Un 3).

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